"Big Enough to Serve You - Not Too Big to Know You"

Loeffler
ELECTRIC INC.

ELECTRICAL SUPPLIES

1942-1948 N. 12 th St. • Toledo 2, Ohio

Phone MAin 8272

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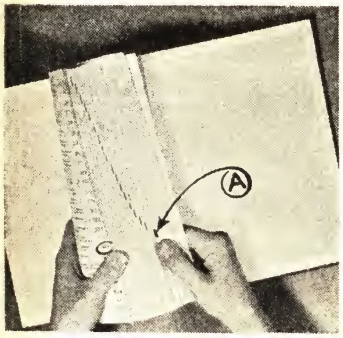
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July 30-1952

ELECTRICAL SUPPLIES

Catalog No. 52

WHOLESALE DISTRIBUTORS

Loeffler ELECTRIC Inc.

1942-48 North 12th Street, Toledo 2, Ohio

Telephone MAin 8272

Use Our Free Parking Lot Corner 12th and Woodruff

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The Jaqua Company
Grand Rapids 2, Michigan



This is our home at 1942 North 12th Street, Toledo, Ohio. Conveniently located, we may be easily reached without encountering heavy downtown traffic. Plenty of free parking in our lot, corner 12th and Woodruff.

Visit our Sunbeam Coffee Bar. Have a good cup of coffee—Free. A constant pour from 8 to 4.

Introduction and General Information

In compiling this Catalog, we have endeavored to make it a complete and up-to-date sales reference book of electrical supplies, illustrating and describing material for which there is an active demand. Special catalogs, bulletins and prices can be furnished upon request, covering supplies not fully described, or shown in this catalog.

LIST PRICES—The list prices in this catalog **are not guaranteed** but agree with latest correct list prices at time of issue. They are not offered as quotations, and are subject to market changes without notice. All local, state or federal taxes of any nature must be added to the prices quoted unless they are already included.

TERMS—To parties of approved credit, net thirty days, subject to standard cash discounts. Unless your standing is known to us or you have a rating with the Commercial Agencies, we recommend that you accompany your first order with references to avoid delay in looking up your credit. C.O.D. orders must be accompanied by a remittance sufficient to pay express or freight charges both ways to insure us against loss should shipment be refused.

ORDERS—When ordering always use manufacturer's name and catalog numbers, and give name of article. Orders should be kept separate from all other correspondence if included in the body of a letter, both the order and the reply to the letter may be delayed.

ROUTING SHIPMENTS—Customers should send shipping instructions with all orders; but if this is not done, we will use our own judgment in selecting route.

LOSS AND DAMAGE IN TRANSIT—We do not hold ourselves responsible for any loss or damage sustained in transit, and claims of such character should be made promptly against carrier; but if we are notified of such claims, we will gladly lend our assistance to secure adjustment. We employ experienced packers and cannot be held responsible for breakage that occurs after we have obtained good order receipt from transportation companies.

SHORTAGE—All shipments are double checked, to prevent errors and shortages. Claims for shortages must be made to us promptly.

REELS—Reels are always charged; credit, however, will be allowed for full amount when returned to the factory in good order, by freight, within one year from date of invoice. Always remit for reels at time invoice covering wire is paid. When ready to return reels, write us for shipping instructions. We promptly remit for reels as soon as received and checked at original shipping point.

RETURNING GOODS—No goods should be returned for credit or exchange without first obtaining permission. We stand ready at all times to rectify any mistake that we make, and without the least cost to our customers, but, under no circumstances, should goods be returned without first consulting us for shipping instructions. We will not receive goods returned without our authorization.

PARTIAL LIST OF MANUFACTURERS
WHOSE LINES ARE DISTRIBUTED BY LOEFFLER ELECTRIC, INC.

Adalet Mfg. Co., The
Adapti Co., The
Add Sales Co.
Aladdin Industries, Inc.
Allied Electric Prods., Inc.
All-Steel Equipment, Inc.
American Brass Co.
American Electric Switch Corp.
Audion Co.
Aristo Mfg. Co.
Art Speciality Co.
Austin Co., M. B.
Averill & Co., E. W.

Basic Products Corp.
Bell Electric Co.
Bernz Co., Inc., Otto
Bommer Spring Hinge Co., Inc.
Boonton Moulding Co.
Brown Corp., W. R.
Buchanan Electrical Products Co., Inc.
Buckingham Mfg. Co., Inc.
BullDog Electric Products Co.
Burniey Battery & Mfg. Co., The
Bussmann Mfg. Co.

Cable Electric Products, Inc.
Casco Products Corp.
Ceramic Specialities Co.
Champion Blower & Forge Co.
Champion DeArment Tool Co.
Circle F Mfg. Co.
Circle Wire & Cable Corp.
Cleveland Switchboard Co.
Collyer Insulated Wire Co.
Colonial Wire Co.
Columbia Cable & Electric Co.
Conduit Fittings Corp.
Conduit Nipple Mfg. Co.
Conduit Pipe Products Co.
Continental Scale Corp.
Cooper-Hewitt Electric Co.
Cornish Wire Co.
Crescent Ins. Wire & Cable Co.
Crouse-Hinds Co.
Curlee Mfg. Co., W. F.

Davis Mfg. Co.
Diamond Expansion Bolt Co.
Dominion Electric Corp.
Doray, Inc.
Dormeyer Corp.
DuPont de Nemours & Co., E. I.
Dura Electric Lamp Co.

Eagle Electric Mfg. Co.
Eastern Tube & Tool Co.
Easy Day Mfg. Co.
Ecklind Tool & Mfg. Co.
Economics Laboratory, Inc.
Edwards & Co.
Electrical Fittings Corp.
Electric Heat Appliances Co.
Electric Steam Radiator Corp.
Electro Mfg. Co.
Electronic Speciality Co.
Evans & Co.

Federal Electric Products Co.
Florence Mfg. Co.
Frankelite Co.
Fresh'nd-Aire Co.

Gaynor Electric Co.
Gedney Electric Co.
General Electric Co., Lamp Division
General Tractor & Equipment Co.
Gerity-Michigan Corp.
Geuder, Paeschke & Frey Co.
Greenlee Tool Co.
Grip-Tite Corp., The

HairVac Co.
Hamilton Beach Co.
Hamilton Metal Products Co.
Haring Switch Plate Co.
Hart & Hegeman Division
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Hexacon Electric Co.
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Hoover Co., The
Hunter Fan & Ventilating Co.
Hykon Mfg. Co.

Ideal Industries, Inc.
Imperial Lighting Products Co.
International Appliance Corp.
International Register Co.

Jaemin Products Co.
Jefferson Electric Co.
Justrite Mfg. Co.

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Kennedy Mfg. Co.
Kester Solder Co.
Keystone Electric Mfg. Co.
Killark Electric Mfg. Co.
Kindorf Co.
Kirlin Co., The
Klein & Sons, Mathias
Kwikon Co.

Lacar Enterprises
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Lau Blower Co.
Leader Electric Mfg. Corp.
Lectricover, Inc.
LeJohn Mfg. Corp.
Lenk Mfg. Co., The
Lewis Engineering & Mfg. Co.
Like-Hearts Industries
Lincoln Mfg. Company

Madison Equipment Co.
Magni-Lite, Inc.
Mark & Co., Clayton
Markstone Mfg. Co.
Massey, Inc., A. H.
McGill Mfg. Co.
McGraw Electric Co.
McKinley-Mockenhaupt Co.
Mephisto Tool Co., The
Micro Switch Division
Midwest Electric Mfg. Co.
Miller Falls Co.
Milwaukee Electric Tool Corp.
Minneapolis-Honeywell Regulator Co.
Minnesota Mining & Mfg. Co.
Minerallac Electric Co.
Minute Mop Co.
Misener Mfg. Co.
Mueller Electric Co.
Mmising Wood Prod.
M & W Electric Mfg. Co.

National Screw & Mfg. Co.
New Britain Machine Co.
New England Carbide Tool Co.
NuTone, Inc.
Nye Tool & Machine Works

Ohio Can & Crown Co., The
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Oster Mfg. Co., John

Pabco Products, Inc.
Paranite Wire & Cable
Parker Sweeper Co.
Paulding, Inc., John I.
Pearl-Wick Corp.
Penn-Union Electric Corp.
Penquin Snow Plow Co.
Perfect-Line Mfg. Corp.
Pioneer Gen-E-Motor Corp.
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Plastray Corp.
Poloron Products, Inc.
Pressteel Co.
Pyramid Instrument Corp.

Queen Products Co., Inc.

Radix Wire Co., The
Ralco Mfg. Co.
Rawlpling Co., Inc., The
Raylite Electric Corp.
Ray-O-Vac Co.
Reliance Molded Plastic Co.
Republic Steel Corp.
Revere Electric Mfg. Co.
Rhode Island Ins. Wire Co.
Richards Co., J. R.
Rodale Mfg. Co.
Rome Cable Corp.
Royal Electric Co.

Salton Mfg. Co., Inc.
Samson Mfg. Co.
Sangamo Elec. Co.
Saratoga Co.
Schick, Inc.
Serugo Rubber Co.
Silex Co., The
Simplet Electric Co.
Slater Electric & Mfg. Co., Inc.
Smith-Gates Corp., The
Sperti Faraday, Inc.
Stamping Products & Mfg. Co.
Standard Products Corp.
Steber Mfg. Co.
Steel City Electric Co.
Sunbeam Corp.
Sunlite Mfg. Co.
Swing-A-Way Mfg. Co.

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Textile Mills Co.
Thepitt Mfg. Co.
Thermador Electrical Mfg. Co.
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Toledo Pipe Threading Machine Co.
Tomic Sales & Eng. Co.
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Turner Brass Works, The

Union Insulating Co., Inc.
Universal Clay Prod. Co., The
U. S. Rubber Co.

Vaico Products Co.
Van Cleef Bros.

Wadsworth Electric Mfg. Co., Inc.
Wagner Malleable Products Co.
Walker Bros.
Waring Prod. Corp.
Welch Co., W. W.
Weiler Mfg. Co.
West Bend Aluminum Co.
Western Home Products
Wiremold Co., The
Wooster Rubber Co.
Woodhead Co., Daniel

Yorkville Metal Products

CONDUIT and THINWALL

We represent the manufacturers of conduit and thinwall listed below and described on the following pages.

TRIANGLE CONDUIT & CABLE COMPANY, INC.

CLAYTON MARK & COMPANY

REPUBLIC STEEL CORPORATION

WALKER BROTHERS

CORRELATIVE CATALOG NUMBERS COVERING LEADING LINES OF CONDUIT FITTINGS AND ELECTRICAL SPECIALTIES

SIZE	STEEL CITY	T & B	GE	APPLETON	RATTAN	NATIONAL	KILLARK	AUSTIN
CONNECTORS FOR ELECTRIC METALLIC TUBING OR THINWALL CONDUIT								
1/2"	T-500-W	5121	SP-4550	96-T-050	HR-5121	9102	TCR-1	7621
3/4"	T-750-W	5221	SP-4575	95-T-075	HR-5221	9103	TCR-2	7622
1"	T-001-W	5321	SP-4600	96-T-100	HR-5321	9104	TCR-3	7623
1 1/4"	T-521-W	5421	SP-4125	96-T-125	5421	9105	TCR-4	7624
1 1/2"	T-051-W	5521	SP-4150	96-T-150	5521	9106	TCR-5	7625
2"	T-002-W	5621	SP-4200	96-T-200	5621	9107	TCR-6	7626
ADAPTERS FOR ELECTRIC METALLIC TUBING OR THINWALL CONDUIT								
1/2"	T-65-W	1050	SP-1050	80-T-60	1050	9302	TWA-1	750
3/4"	T-66-W	1075	SP-1075	80-T-61	1075	9303	TWA-2	751
1"	T-67-W	1090	SP-1100	80-T-62	1090	9304	TWA-3	752
1 1/4"	T-68-W	1125	SP-1125	80-T-63	1125	9305	TWA-4	753
1 1/2"	T-69-W	1150	SP-1150	80-T-64	1150	9306	TWA-5	754
PIPE STRAPS (ONE HOLE MALLEABLE IRON) FOR E. M. T. OR THINWALL CONDUIT								
1/2"	T-16-W	4176	SP-4176	171-T-50	4176	4511	EMT-1	7581
3/4"	T-17-W	4177	SP-4177	171-T-51	4177	4512	EMT-2	7582
1"	T-18-W	4178	SP-4178	171-T-52	4178	4513	EMT-3	7583
1 1/4"	T-19-W	4179	SP-4179	171-T-53	4179	4514	EMT-4	7584
1 1/2"	T-20-W	4180	SP-4180	171-T-54	4180		EMT-5	7585
2"	T-21-W	4181	SP-4181	171-T-55	4181		EMT-6	7586
90° SHORT ELBOWS FOR E. M. T. OR THINWALL CONDUIT (90° CONNECTORS)								
1/2"	T-90-W	4230	SP-4230	73-T-90	4230		TCRS-1	7671
3/4"	T-91-W	4231	SP-4231	73-T-91	4231		TCRS-2	7672
1"	T-92-W	4232	SP-4232	73-T-92	4232		TCRS-3	7673
90° LONG ELBOWS FOR E. M. T. OR THINWALL CONDUIT								
1/2"	T-80-W	4220	SP-4220	37-T-90			TCRL-1	7681
3/4"	T-81-W	4221	SP-4221	37-T-91			TCRL-2	7682
1"	T-82-W	4222	SP-4222	37-T-92			TCRL-3	7683
1 1/4"	T-83-W	4223	SP-4223	37-T-93			TCRL-4	7684
ENTRANCE SERVICE HEADS FOR E. M. T. OR THINWALL CONDUIT								
1/2"	T-30-W	5525	SP-1326	FT-50	430		YFB-714	7541
3/4"	T-31-W	5526	SP-1327	FT-75	431		YFB-724	7542
1"	T-32-W	5527	SP-1328	FT-100	432		YFB-734	7543
1 1/4"	T-33-W	5528	SP-1329	FT-125	433		YFB-743	7544
SERVICE ENTRANCE ELLS FOR E. M. T. OR THINWALL CONDUIT								
1/2"	T-40-W	5490	SP-1390	317-T-90	440		YSLB-1	7561
3/4"	T-41-W	5491	SP-1391	317-T-91	441		YSLB-2	7562
1"	T-42-W	5492	SP-1392	317-T-92	442		YSLB-3	7563
1 1/4"	T-43-W	5493	SP-1393	317-T-93	443		YSLB-4	7564

CORRELATIVE CATALOG NUMBERS COVERING LEADING LINES OF CONDUIT FITTINGS AND ELECTRICAL SPECIALTIES

CONDUIT PIPE STRAPS ONE HOLE, MALLEABLE IRON

SIZE	STEEL CITY	T & B	GE	RATTAN	APPLETON	NATIONAL	KILLARK	AUSTIN
3/8"	175	1275	SP-1275		17149		PS-48	240
1/2"	176	1276	SP-1276	511	17150	4606	PS-22	241
3/4"	177	1277	SP-1277	512	17151	4607	PS-44	242
1"	178	1278	SP-1278	513	17152	4608	PS-2	243
1 1/4"	179	1279	SP-1279	514	17153	4609	PS-214	244
1 1/2"	180	1280	SP-1280	515	17154	4610	PS-212	245
2"	181	1281	SP-1281	516	17155	4611	PS-3	246
2 1/2"	182	1282	SP-1282	517	17156	4612	PS-312	247
3"	183	1283	SP-1283	518	17157	4613	PS-4	248
3 1/2"	184	1284	SP-1284	519	17158	4614	PS-412	249
4"	185	1285	SP-1285	520	17159	4615	PS-5	250
4 1/2"	186	1286	SP-1286					251
5"	187	1287	SP-1287	522				252
6"	188							253

REDUCING BUSHINGS (THREADED)

SIZE	STEEL CITY	CROUSE HINDS	AUSTIN	APPLETON	GE	KILLARK	T & B
3/4-1/2"	17100	RE-21	21-B	8201	SP-3601	R-21	601
1-1/2"	17101	RE-31	31-B	8202	SP-3602	R-31	602
1-3/4"	17102	RE-32	32-B	8213	SP-3603	R-32	603
1 1/4-1/2"	17103	RE-41	41-B	8203	SP-3604	R-41	604
1 1/4-3/4"	17104	RE-42	42-B	8214	SP-3605	R-42	605
1 1/4-1"	17105	RE-43	43-B	8224	SP-3606	R-43	606
1 1/2-1/2"	17106	RE-51	51-B	8204	SP-3607	R-51	607
1 1/2-3/4"	17107	RE-52	52-B	8215	SP-3608	R-52	608
1 1/2-1"	17108	RE-53	53-B	8225	SP-3609	R-53	609
1 1/2-1 1/4"	17109	RE-54	54-B	8234	SP-3610	R-54	610
2-1/2"	17110	RE-61	61-B	8205	SP-3611	R-61	611
2-3/4"	17111	RE-62	62-B	8216	SP-3612	R-62	612
2-1"	17112	RE-63	63-B	8226	SP-3613	R-63	613
2-1 1/4"	17113	RE-64	64-B	8235	SP-3614	R-64	614
2-1 1/2"	17114	RE-65	65-B	8243	SP-3615	R-65	615

COUPLINGS FOR ELECTRIC METALLIC TUBING OR THINWALL CONDUIT

SIZE	STEEL CITY	T & B	GE	APPLETON	RATTAN	NATIONAL	KILLARK	AUSTIN
1/2"	T-050-W	5120	SP-2550	95-T-050	HR-5120	9202	TCG-1	7601
3/4"	T-075-W	5220	SP-2575	95-T-075	HR-5220	9203	TCG-2	7602
1"	T-100-W	5320	SP-2600	95-T-100	HR-5320	9204	TCG-3	7603
1 1/4"	T-125-W	5420	SP-2125	95-T-125	5420	9205	TCG-4	7604
1 1/2"	T-150-W	5520	SP-2150	95-T-150	5520	9206	TCG-5	7605
2"	T-200-W	5620	SP-2200	95-T-200	5620	9207	TCG-6	7606

CORRELATIVE CATALOG NUMBERS COVERING LEADING LINES OF CONDUIT FITTINGS AND ELECTRICAL SPECIALTIES

LOOMWIRE CONNECTORS

STEEL CITY	NATIONAL	GE	RATTAN	T & B	APPLETON	AUSTIN	FITS KO
574		3301-V	160-V	3301-V	7315-V	6062-V	1/2"
575	9050-EZ	3302	Y-38	3302-V	7285-V	2004	1/2"
573	9052-S	SP-7011	Y-12		7287-V	6064-V	1/2"
573-S	9054-S	SP-7012	Y-12-B		7288-V	6064-VS	3/4"
572		SP-7013	Y-34		7289-V	6065-V	3/4"
572-S		SP-7014	Y-34-B			6065-S	1"
577	708				15233	6008	3/4"
578	709				15234	6009	1"
570					7235-V	9063-V	1/2"

ENTRANCE CAPS

SIZE	STEEL CITY	T & B	APPLETON	GE	RATTAN	NATIONAL	KILLARK	AUSTIN
1/2"	260	1525	F-50	SP-1525	920	4530	FB-714	1525
3/4"	261	1526	F-75	SP-1526	921	4531	FB-724	1526
3/4"	261	1521	F-75	SP-1526	921	4531	FB-724	1526
1"	262	1527	F-100	SP-1527	922	4532	FB-734	1527
1"	262	1522	F-100	SP-1527	922	4532	FB-734	1527
1 1/4"	263	1528	F-125	SP-1528	923	4533	FB-745	1528
1 1/4"	263	1523	F-125	SP-1528	923	4533	FB-745	1528
1 1/4"	263	1524	F-125-S	SP-1528	923	4533	FB-745	1528
1 1/2"	264	1529	F-150	SP-1529	924	4534	FB-755	1529
2"	265	1530	F-200	SP-1530	925		FB-763	1530
2 1/2"	266	1531	1932	SP-1531	926		FB-773	1531
3"	267	1532	1933	SP-1532	927		FB-783	1532
3 1/2"	268	1533	1934	SP-1533	928		FB-793	1533
4"	269	1534	1935	SP-1534	929		FB-703	1534
4 1/2"	2694	1553					FB-7113	1535
5"	2695	1554					FB-7123	1536
6"	2696	1555					FB-7143	....

CHASE OR CONDUIT NIPPLES

SIZE	STEEL CITY	T & B	GE	APPLETON	RATTAN	AUSTIN
1/2"	152	842	SP-842	7201	470	7842
3/4"	153	843	SP-843	7202	471	7843
1"	154	844	SP-844	7203	472	7844
1 1/4"	155	845	SP-845	7115	473	7845
1 1/2"	156	846	SP-846	7116	474	7846
2"	157	847	SP-847	7117	475	7847
2 1/2"	158	848	SP-848	7118	476	7848
3"	159	849	SP-849	7119	477	7849
3 1/2"	160	850	SP-850	7120	478	7850
4"	161	851	SP-851	7121		
4 1/2"	162	852	SP-852	7122		
5"	163	853	SP-853	7123		

CORRELATIVE CATALOG NUMBERS COVERING LEADING LINES OF CONDUIT FITTINGS AND ELECTRICAL SPECIALTIES

SIZE	STEEL CITY	T & B	GE	APPLETON	NATIONAL	KILLARK	AUSTIN	RATTAN
ENTRANCE ELLS								
½"	270	1490	SP-1490	1790	4550	SLB-1	1590	SL-2
¾"	271	1491	SP-1491	1791	4551	SLB-2	1591	SL-3
1"	272	1492	SP-1492	1792	4552	SLB-3	1592	SL-4
1¼"	273	1493	SP-1493	1793	4553	SLB-4	1593	SL-5
1½"	274	1494	SP-1494	1794	4554	SLB-5	1594	SL-6
2"	275	1495	SP-1495	1795		SLB-6	1595	SL-8
2½"	276	1496	SP-1496			SLB-7		
3"	277	1497	SP-1497			SLB-8		

SIZE	STEEL CITY		T & B	GE	RATTAN	APPLETON	AUSTIN
	UNIV.	ERICK.					
UNIVERSAL, ERICKSON, AND CONDUIT UNION COUPLINGS							
½"	325	750	675	SP-675	906	18801	6075
¾"	326	751	676	SP-676	907	18802	6076
1"	327	752	677	SP-677	908	18803	6077
1¼"	328	753	678	SP-678	909	18804	6078
1½"	329	754	679	SP-679	910	18805	6079
2"	330	755	680	SP-680	911	18806	6080
2½"	331	756	681	SP-681	912	18807	6081
3"	332	757	682	SP-682	913	18808	6082
3½"	333	758	683	SP-683	914	18809	6083
4"	334	759	684	SP-684	915	18810	6084
4½"	335		685	SP-685		18811	

GROUND CLAMPS (Ground Clamps Vary in Construction and Price)

SIZE	STEEL CITY	T & B	GE	APPLETON	RATTAN	KILLARK
FOR BX AND GROUND WIRE						
½-¾-1"	365	3962	SP-828	9448	832	GFA
1¼-1½-2"	365-L				835	
FOR GROUND WIRES ONLY						
½-¾-1"	361	3840	SP-821	9489	670	GF
1¼-1½-2"	361-L			9497		
WITH BODY FOR 1/2" CONDUIT						
½-¾-1"	355	3932	SP-825	9402	831	GCSC-1
1¼-1½-2"	358	3933		9482	834	

CORRELATIVE CATALOG NUMBERS COVERING LEADING LINES OF CONDUIT FITTINGS AND ELECTRICAL SPECIALTIES

STEEL CITY	NATIONAL	GE	RATTAN	T & B	APPLETON	AUSTIN	FITS KO	WILL HOLD
STRAIGHT CONNECTORS FOR FLEXIBLE ARMORED CABLE AND METALLIC CONDUIT								
522	2163-EZ	SP-7120	120-V	253-V	7265-V	2053-V	½"	14-2, 12-2, 14-3
526-S	2164-EZ	SP-7124	120-AV	248-V	7231-V	2053-LV	½"	10-3
526	2165-EZ	SP-6121	121-V	260-V	7480-V	2053-AV	½"	10-3, 10-2
527-S	2165-XEZ	.....	.....	.....	.....	.....	½"	12-4, 10-4, 8-2
527	2166-EZ	SP-7123	123-V	254-V	7481-V	2054	½"	8-2, 12-4, 10-4
528-S	2166-XEZ	SP-6127	123-BV	278-V	7481-S	2054-S	¾"	8-2, 8-3, 6-2
528	2167-EZ	SP-6124	124-V	255-V	7482-V	2055	¾"	6-2, 6-3, 4-2
529-S	2167-XEZ	SP-6143	124-BV	264-V	7482-S	2055-S	1"	4-2, 4-3
529	2169-EZ	SP-6125	125	256-V	7483	2056	1"	1
530	2170-EZ	SP-6133	126	257	7484	2057	1¼"	1¼
532	2171-EZ	SP-6133½	127	258	7485	2058	1½"	1½
534	2172-EZ	SP-6134	128	259	7486	2059	2"	2
535	2173-S	SP-6129	129	249	7487	2060	2½"	2½
536	2174-S	SP-6130	140	277	7488	2061	3"	3
90° ANGLE CONNECTORS								
550	2210-EZ	SP-6192	192½-V	266-V	7380-V	2086-V	½"	14-2, 12-2, 14-3
552-S	2213-XEZ	SP-6185	192-A	272-V	7380-VL	.....	½"	12-3, 10-3, 10-2
552	2211-EZ	SP-6193	193½-V	268-V	7381-V	2088-V	½"	8-2
553	2214-EZ	SP-6194-A	194½-V	270-V	7382-V	2090-V	¾"	6-3, 6-2, 4-3
554	2216-EZ	SP-6195	195½	273-V	7383	2092	1"	1
555	2218-EZ	SP-6196	196¾	274	7384	2074	1¼"	1¼
556	2234-EZ	SP-6197	197½	275	7385	2076	1½"	1½
557	2236-EZ	SP-6180	198	276	7386	2078	2"	2
558	2238-EZ	SP-6181	143	.....	.....	.....	2½"	2½
559	2240-EZ	SP-6182	144	.....	.....	.....	3"	3
45° ANGLE CONNECTORS								
540	2208-EZ	SP-6190	190-V	265-V	7245-V	2085-V	½"	14-2, 12-2, 14-3
542-S	2208-XEZ	.....	.....	281-V	7245-VL	.....	½"	14-4, 10-3, 10-2
542	2209-SO	SP-6191	191-V	267-V	7246-V	2087-V	½"	8-2
543	2215-SO	SP-6194	194-V	269-V	7247-V	2089	¾"	6-3, 6-2, 4-3
DUPLEX CONNECTORS								
515	2175-EZ	SP-7126	150-V	.....	7240-V	2253-V	½"	.....
520	.....	SP-7125	130-V	239-V	7241	2254	½"	.....

CLAYTON MARK "ELECTRICTUBE" ELECTRICAL METALLIC TUBING

THINWALL RIGID STEEL CONDUIT

Underwriters' Approved



Electrictube is made of best quality open hearth steel, cold rolled to insure uniform gauge and smooth surfaces on both sides. The coils of steel strip are fabricated into tubes perfectly circular in form and homogeneously electrically welded by direct current, without interior or exterior ridge or groove at the seam. Tubes are held to accurate exterior diameter, thereby insuring satisfactory use of any standard dimension threadless fitting. Interior diameter is the same as standard rigid steel conduit pipe of the same nominal size.

The steel used in the production of Electrictube is of the quality which assures easy bending of tube and end flanging without break or fracture. Tubes are of exact 10-foot lengths; they are straight, with square end cuts, and free from inside or outside burr.

Exterior surface is coated by the electroplating process, permitting a coating of 100 per cent pure zinc which is evenly deposited into the pores of the steel. This coating cannot crack when bent.

The Electrictube interior surface is coated with a specially-developed enamel. The enamel is baked to the exact temperature which insures complete ease in pulling of wires. It will not soften under any working temperature, nor will it flake or chip when subjected to extreme bends and turns.

ELECTRICTUBE

Size Inches	Wt. Lbs. Per 1000 Ft.	Diameter—Internal	Diameter—External	Feet Per Bdle.
½	321	.622	.706	100
¾	488	.824	.922	100
1	711	1.049	1.163	100
1¼	1000	1.380	1.508	50
1½	1180	1.610	1.738	50
2	1500	2.067	2.195	30

Furnished in 10-foot lengths without couplings. Weights and dimensions are nominal.

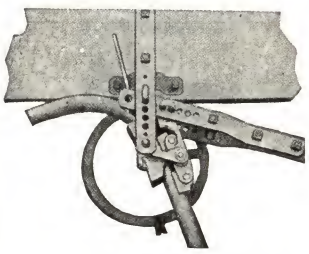
ELBOWS



Size Inches	Radius Inches	Offset Inches	Wt. Lbs. Per 100
1	5.750	8.750	100
1¼	7.250	10.500	144
1½	8.250	11.750	180
2	9.500	13.500	277

REPUBLIC BENDING TOOLS

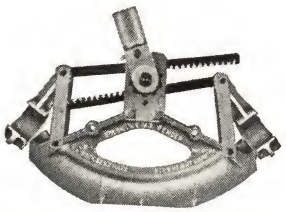
HOSSFELD BENDER



Makes full, round, smooth bends with one sweep of the hand lever on sizes 1¼-inch and smaller. Bends on 1½ and 2-inch are made by feeding the tube into the bender. Available with dies for all sizes from ½ to 2-inch, inclusive. May be had with all dies or with only dies for sizes required. Shipping weight, 190 lbs.

REPUBLIC BENDING TOOLS

REPUBLIC 1¼-INCH E.M.T. BENDER



The Republic 1¼-inch E.M.T. Bender is a precision tool enabling workmen to make bends accurately and quickly.. It is portable for use anywhere on the job and rugged enough to withstand bench installation.

It is engineered to give many years of satisfactory service. The body and hooks are cast from the best grade of malleable iron. Other functional parts are either cadmium plated or Parkerized.

ELECTRUNITE "INCH-MARKED"® BENDER



Will enable the electrician to use the Electrunite Bending System with "Inch - Marked" Republic Electrunite E.M.T. to best advantage. It is a one-piece casting with no moving parts to get out of order. It predetermines stubs, back-to-back, offset and saddle bends to exact dimensions. It produces any standard type or radius bend accurately and easily. Simple instructions and markings are cast into the bender — cannot be lost.

Cat. No.	Size Inches	Std. Pkg.	Wt. Lbs. Per 100
1472	½	10	250
1473	¾	10	420
1474	1	2	800

E.M.T. HICKEY



Makes bends of any desired radius. To prevent kinking, the tube should be "inched" through, not more than ten degrees being pulled at a time. An excellent tool for stubbing-up in concrete work, and for making short or close bends.

Cat. No.	Size Inches	For Use with Pipe Handle	Std. Pkg.	Wt. Lb Each
2195	½	¾-inch	1	1¾
2196	¾	1 -inch	1	2¾
2197	1	1 -inch	1	4
2198	1¼	1¼-inch	1	10
2199	1½	1¼-inch	1	12½
2200	2	1½-inch	1	15

MANDREL SPRINGS



A coil spring designed for use in connection with moving stubs in concrete and in making very short radius bends either with or without the use of the E.M.T. Hickey. The spring fits snugly inside the tubing and acts as a mandrel to support the wall and eliminate the possibility of kinking at the point of bend. After the bend is made, the spring can be removed easily by backing up slightly on the bend, or by twisting the spring.

Cat. No.	Size Inches	Description	Wt. Lb. Each
50	½	Use inside ½-inch size	½
75	¾	Use inside ¾-inch size	1

T & B FITTINGS FOR EMT
(Thinwall Conduit)

BENDERS FOR EMT



Forms a perfectly smooth round raceway for the conductors in any type of curve. Will also bend the next smaller size of standard rigid conduit, as noted below.

Cat. No.	Size	Std. Pkg.	Pkg. Wt.	Price Each
4195	½-inch Bender	1	2½	**$2.95**
4196	¾-inch Bender	1	4	**5.00**
4197	1 -inch Bender	1	7	**9.70**

HICKEY TYPE BENDERS



Cat. No.	Size Inch	Std. Pkg.	Wt.Lbs. Std. Pkg.	Price Each
4185	½	1	2	**$2.90**
4186	¾	1	3½	**4.00**

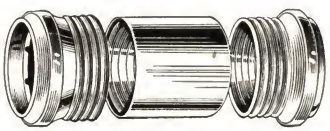
TOMIC EMT THINWALL CONNECTORS



Interior stainless steel lock washer holds tubing securely; makes uniform, safe, permanent, vibration - proof 6 - point ground around entire tube. Concrete tight. No inside ridges to snag fishtape or fray wire, easy to install, easy to inspect. Ideal for cramped or corner locations. Simple, strong, solid construction, cadmium finish. Underwriters' Approved. Furnished with Locknuts assembled.

Cat. No.	Size Inches	Std. Pkg.	Carton Quan.	Wt.Lbs. Per 100	Price per 100 Less than Carton	Carton	Std. Pkg.
10	½	1000	200	3	**$11.90**	**$ 9.10**	**$ 7.80**
11	¾	500	100	4	**14.90**	**12.50**	**10.45**
12	1	50	25	5	**22.10**	**18.50**	**16.00**

TOMIC EMT THINWALL COUPLING



Screws in on straightaway jobs — snaps in on corner jobs. No tools needed, will never shake loose, positive ground. Smooth raceway assured. Easy to install, easy to inspect; simple, strong construction. Change from conduit to thinwall in middle of a job without special expensive fittings.

Cat. No.	Size Inches	Std. Pkg.	Carton Quan.	Wt.Lbs. Per 100	Price per 100 Less than Carton	Carton	Std. Pkg.
310	½	250	50	9	**$19.25**	**$17.25**	**$15.75**
311	¾	100	25	12	**26.25**	**23.10**	**21.00**
312	1	50	25	18½	**35.00**	**31.75**	**28.75**

T & B FITTINGS FOR EMT
(Thinwall Conduit)

RAINTIGHT BOX CONNECTORS, AND COUPLINGS
Approved by Underwriters' Laboratories



No. 5121



No. 5120

Formed steel ribbed glands, with opposite faces parallel, are easily tightened with wrench or pliers. Raintight construction.

Watertight Couplings and Connectors

Couplings Cat. No.	Price Per 100	Size Inches	Unit Pkg.	Std. Pkg.	Connectors Cat. No.	Price Per 100
5118	**$32.00**	⅜	50	200	**5119**	**$27.25**
5120	**22.00**	½	50	500	**5121**	**18.00**
5220	**30.00**	¾	25	250	**5221**	**25.50**
5320	**46.50**	1	25	50	**5321**	**39.00**
5420	**85.00**	1¼	5	25	**5421**	**73.50**
5520	**122.00**	1½	2	10	**5521**	**112.00**
5620	**170.00**	2	2	5	**5621**	**160.00**

Non-Watertight Couplings and Connectors

4270	**20.00**	½	50	200	**4271**	**15.60**

SET SCREW COUPLING AND CONNECTOR
Approved by Underwriters' Laboratories



No. 5130



No. 5131

These fittings have a peep hole to show that the conduit is in place and hardened points on the set screws to hold it there. Made from steel with a bright Tabolite finish.

Cat. No.	Description	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5130	½-inch Coupling	50	500	8½	**$16.00**
5131	½-inch Connector	50	500	8	**12.00**



T & B "SOCKS" CONNECTORS
For Thinwall Conduit (E.M.T.)

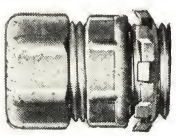
Cat. No.	Size In.	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5181	½	200	1000	3	**$12.50**
5281	¾	100	5000	4½	**16.70**
5381	1	25	50	7	**25.50**

T & B "SOCKS" COUPLINGS
For Thinwall Conduit (E.M.T.)



Cat. No.	Size In.	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5180	½	50	250	8½	**$25.25**
5280	¾	25	100	11	**33.50**
5380	1	25	50	18	**46.00**

T & B COUPLING AND CONNECTOR
Approved by Underwriters' Laboratories



No. 4270



No. 4271

Light steel fittings for use where a raintight fitting is not needed. Smooth interior free from burrs.

Cat. No.	Description	Unit Pkg.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
4270	½-inch Coupling	50	200	11	**$20.00**
4271	½-inch Connector	50	200	8½	**15.60**

T & B FITTINGS FOR EMT

(Thinwall Conduit)

T & B MALLEABLE IRON EMT STRAPS

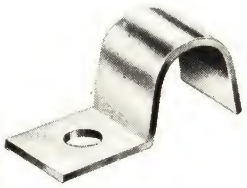


A one hole support made of malleable iron, designed specially for a snug fit on the E.M.T. ⅜ in. size made of steel.

Cat. No.	Size In.	Std. Pkg.	Wt.	Price Per 100	Cat. No.	Size In.	Std. Pkg.	Wt.	Price Per 100
4175	⅜	500	3	**$8.80**	**4179**	1¼	100	18	**$12.20**
4176	½	500	5	**4.15**	**4180**	1½	50	26	**19.20**
4177	¾	500	7	**6.55**	**4181**	2	25	48	**27.25**
4178	1	100	9	**9.60**	.....	..	....	....	.....

STEEL PIPE STRAPS

For Thinwall Conduit (E.M.T.)



Cat. No.	Size In.	Unit Quan.	Std. Pkg.	Price Per 100
4159	½	100	500	**$4.00**
4160	¾	50	500	**6.25**
4161	1	50	100	**9.10**

T & B RAINTIGHT SHORT ELBOWS

Approved by Underwriters' Laboratories



Accurate, machine-cut threads and carefully bushed edges. Malleable iron, plated inside and out with Tabolite. Supplied with a slotted steel gripping ring.

Cat. No.	Size Inches	Radius Inches	Offset Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
4230	½	9/16	11/16	25	50	22	**$ 59.00**
4231	¾	11/16	13/16	25	50	32	**93.00**
4232	1	13/16	15/16	5	25	52	**142.00**
4233	1¼	1 1/16	1 3/32	2	10	80	**360.00**
4234	1½	1 3/16	1 11/32	2	10	160	**515.00**
4235	2	1 7/16	1⅝	2	10	240	**785.00**

WRENCH AND REAMER FOR E.M.T.



A combination tool, extremely handy for all ½-inch and ¾-inch E.M.T. installations. The same tool tightens the glands on couplings and connectors, removes burrs from tubing, and reams edge of conduit. Drop-forged steel, heat-treated and tempered. Price, No. **33**.....each **$1.70**

T & B ENTRANCE ELLS

Neat, malleable ells equipped with raintight glands and serrated steel gripping rings. Heavy protective plating.



Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5490	½	5	50	58	**$140.00**
5491	¾	5	20	92	**185.00**
5492	1	5	10	140	**256.00**
5493	1¼	1	10	255	.....
5494	1½	1	5	310	.....
5495	2	1	5	500	.....

AMERICAN SEALTITE CONDUIT

For Use with Threadless Rigid Conduit Fittings



Sealtite Electrical Conduit manufactured by the American Metal Hose Branch of The American Brass Company is a flexible liquid-tight conduit designed to protect wiring on any type of machine or electrical unit where wiring is endangered by moisture, oils, vapors, abrasion, acids, etc.

The lining of Standard Sealtite is galvanized steel flexible tubing. A synthetic jacket is extruded over the lining to make a moisture and oil-proof conduit which is bendable to small radii.

Standard Sealtite is available in long lengths to be cut and assembled "on the job" — an obvious advantage to the user because long lengths mean less scrap.

Foolproof grounding bushings, used to assure ground contact between the metal lining and the fittings, are packaged separately in standard quantities. Fittings for Standard Sealtite are the same as used ordinarily with standard rigid electrical conduit and are purchased separately.

Nom. I.D. Elec. Conduit	Actual I.D. Inches Min.	Actual I.D. Inches Max.	Outside Diam. Inches Min.	Outside Diam. Inches Max.	Approx. Bend Diam. Inches	Wt. Lbs. Per Foot
⅜	.484–	.504	.690	.710	8	.259
½	.622–	.642	.820	.840	10	.327
¾	.820–	.840	1.030	1.050	15	.433
1	1.041–	1.066	1.290	1.315	18	.672
1¼	1.380–	1.410	1.630	1.660	21	.916
1½	1.560–	1.590	1.870	1.900	24	1.231
2	2.005–	2.045	2.355	2.375	28	1.641

Commercial tolerances apply on above figures.

Data on larger sizes on application.

FITTINGS FOR SEALTITE CONDUIT

TYPE L NO-THREAD CONNECTORS



½ to 2-Inch



2½ to 4-Inch

Cat. No.	Size In.	Carton	Std. Pkg.	Cat. No.	Size In.	Carton	Std. Pkg.
CF-80N95	½	25	100	**CF-80N90**	2	1	5
CF-80N96	¾	10	40	**CF-80N91**	2½	1	5
CF-80N97	1	5	20	**CF-80N92**	3	1	5
CF-80N98	1¼	5	20	**CF-80N93**	3½	1	5
CF-80N99	1½	2	10	**CF-80N94**	4	1	5

SIMPLET OIL AND VAPOR TIGHT FITTINGS

For Use with "Sealtite" Plastic Covered Flexible Metallic Conduit

(Made by The American Metal Hose Branch of The American Brass Company)

These fittings are used on plastic covered flexible metallic conduit recommended for wiring of machine tools and similar installations where oil and vapor tight connection is required. Complete with threaded grounding bushing.

MACHINE TOOL FITTINGS



90 Degree Angle



Straight Type

Cat. No.	Size	Std. Pkg.	Carton Quan.	Wt. Lbs. Std. Pkg.	NET PRICE PER 100 Std. Pkg. Quan.	Carton Quan.	Less than Carton Quan.
Straight Type							
5204	⅜	100	25	12	**$31.00**	**$36.40**	**$40.00**
5214	½	100	25	16	**31.00**	**36.40**	**40.00**
5224	¾	50	25	13	**48.50**	**57.30**	**63.15**
5234	1	25	5	11	**66.00**	**77.60**	**85.30**
5244	1¼	25	5	18	**118.00**	**139.20**	**153.30**
5254	1½	10	2	11	**164.00**	**193.40**	**212.95**
5264	2	5	1	10	**312.00**	**360.00**	.....
90 Degree Angle Type							
5304	⅜	50	25	9	**46.50**	**57.00**	**72.00**
5314	½	50	25	11	**46.50**	**57.00**	**72.00**
5324	¾	50	25	17	**74.00**	**91.00**	**115.00**
5334	1	25	5	15	**158.00**	**196.00**	**251.00**
5344	1¼	25	5	23	**242.00**	**302.00**	**382.00**
5354	1½	10	2	15	**292.00**	**362.00**	**457.00**
5364	2	5	1	14	**437.00**	**542.00**	.....
45 Degree Angle Type							
5404	⅜	50	25	9	**46.50**	**57.00**	**72.00**
5414	½	50	25	11	**46.50**	**57.00**	**72.00**
5424	¾	50	25	17	**74.00**	**91.00**	**115.00**
5434	1	25	5	15	**158.00**	**196.00**	**251.00**
5444	1¼	25	5	23	**242.00**	**302.00**	**382.00**
5454	1½	10	2	15	**292.00**	**362.00**	**457.00**
5464	2	5	1	14	**437.00**	**542.00**	.....

WIREDUCT NON-METALLIC FLEXIBLE CONDUIT

ALL-WEATHER LOOM



For protection of wiring circuits in all types of buildings; also for protection of electric circuits in autos, trucks, buses, etc.

Inside Dia., In.	Actual Size Diameter Inches	Feet Per Coil	Wt. Lbs. Per 1000 Ft.
7/32	.288	250	28
¼	.320	250	32
⅜	.445	250	40
½	.570	200	55
⅝	.695	200	80
¾	.820	150	112
1	1.070	100	160
1¼	1.375	‡	260
1½	1.625	‡	330
1¾	1.875	‡	.....
2	2.125	‡	.....
2¼	2.375	‡	.....
2½	2.625	‡	.....

‡Odd length orders will be filled with nearest odd length.

CLAYTON MARK STANDARD RIGID STEEL CONDUIT PIPE

Underwriters' Approved

Steel pipe in this nationally-known conduit line is made by experienced operators in a modern mill, which is a unit of the conduit finishing plant. The steel is of a quality which bends, cuts and threads easily. Pipe is thoroughly cleaned before the coating processes. Threads on all pipe, elbows and couplings are cut accurately to standard gauge. All standard elbows are accurately gauged to 90°. Uncoupled ends of conduit and pipe, and both threaded elbow ends are made safe from mechanical injury by thread protectors.

"GALVAKOTE"



"Galvakote" exterior surface, including threads, is coated with pure zinc evenly deposited by the electro-plating process. This permits good bonding in concrete and will not crack even under severe bending. Interior smooth surface entirely and evenly coated with best quality black enamel, properly baked to prevent flaking or stickiness.

"ENAMELKOTE"



"Enamelkote" coated inside and outside with the highest grade black enamel, specially prepared and baked in scientifically controlled ovens to insure adhesion to pipe wall and sufficient flexibility to prevent flaking in bending.

Standard Nominal Weights and Dimensions

Conduit Pipe

Size Inches	Weight per Ft. in Lbs.	Outside Diam.	Inside Diam.	Thickness Inch	Thread Per Inch
½	.852	.840	.622	.109	14
¾	1.134	1.050	.824	.113	14
1	1.684	1.315	1.049	.133	11½
1¼	2.281	1.660	1.380	.140	11½
1½	2.731	1.900	1.610	.145	11½
2	3.678	2.375	2.067	.154	11½
2½	5.819	2.875	2.469	.203	8
3	7.616	3.500	3.068	.216	8
3½	9.202	4.000	3.548	.226	8
4	10.889	4.500	4.026	.237	8
5	14.810	5.563	5.047	.258	8
6	19.185	6.625	6.065	.280	8

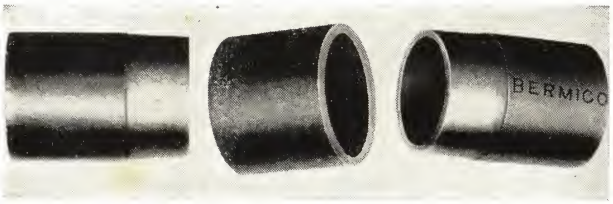
Couplings and Elbows

Couplings Size Inches	Couplings Average Wt. Per 100 in Lbs.	Elbows Size In.	Elbows Average Wt. Lbs. 100 in Lbs.	Elbows Radius Inches	Elbows Offset Inches
½	11.6	½	82	4.000	6.500
¾	20.9	¾	109	4.500	7.250
1	34.3	1	201	5.750	8.625
1¼	53.5	1¼	313	7.250	10.000
1½	74.3	1½	441	8.250	11.000
2	120.8	2	707	9.500	13.625
2½	172.0	2½	1411	10.500	15.687
3	249.8	3	1850	13.000	17.750
3½	424.1	3½	2979	15.000	20.000
4	474.1	4	3528	16.000	21.312
5	700.0	5	6575	24.000	29.000
6	750.0	6	9645	30.000	36.500

Conduit is furnished in 10 foot lengths, threaded both ends with one coupling.

BERMICO FIBRE CONDUIT

A durable protective raceway for underground cables. Made with tough virgin wood fibre. Vacuum pressure impregnation process imparts maximum pitch content. Has high mechanical strength. Low water absorption. Acid resistant. Provides extra safety margins. Easy to install.



BERMICO COUPLINGS

One precision milled coupling furnished with each length of conduit. Popular Barrier Coupling saves time, costs—prevents splitting. Hall Cork Gasket Coupling insures watertight joint.

BERMICO BENDS AND ELBOWS

Made from same strong, durable Bermico Fibre. Smooth inner surface permits easy pulling of cables around curves.

A COMPLETE LINE OF BERMICO FITTINGS

End Bells
Reducers
Caps
Adapters
Plugs
Expansion Joints

BERMICO "U" DUCT

A guard for vertical cables on poles. High dielectric strength.

PLASTIC SPACERS

Interlocking, high impact Plastic Spacers available in all sizes 2 to 5 inches, separation of 1, 1½, 2 and 3 inches.

BERMICO FIELD TOOLING MACHINE

Portable machine for accurate conduit milling in the field. Simple. No trained operator needed. Comes in strong compact carrying case.

CONDUIT PIPE PRODUCTS

CONDUIT NIPPLES

Hot Dip Galvanized (Underwriters' Labeled)



List Price Each

Pipe Size	Close	1½	2	2½	3	3½	4	5	6
½"	$.05	$.06	$.07	$.07	$.07	$.08	$.08	$.10	$.12
¾"	.06	...	.08	.09	.09	.10	.11	.12	.14
1"	.08	...	.09	.12	.13	.14	.15	.16	.18
1¼"	.11	...	.12	.12	.16	.18	.18	.20	.24
1½"	.13	...	.14	.14	.20	.22	.22	.25	.30
2"	.18	...	...	.18	.26	.28	.30	.34	.40
2½"	.38	...	...	...	.40	.52	.55	.66	.76
3"	.45	...	...	...	.50	.60	.65	.70	.80
3½"	.65	...	...	...	...	...	.90	1.05	1.15
4"	.85	...	...	...	...	...	.90	1.20	1.30
4½"	1.25	...	...	...	...	...	1.30	1.70	2.10
5"	1.55	...	...	...	...	...	...	2.45	2.65
6"	1.85	...	...	...	...	...	...	2.90	3.00

Any lengths not listed above take list price applicable to next longer length on above schedule.

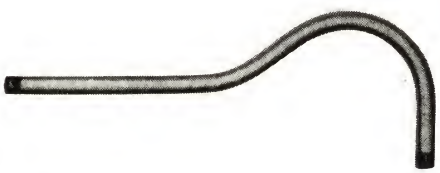
CONDUIT RUNNING THREAD PIPE

3-Foot Lengths—Type "C"

Pipe Hot Dip Galv.—Threads Electro Galv.

Size Pipe	Approx. Wt. Lbs. 100 Ft.	Price Per Foot	Size Pipe	Approx. Wt. Lbs. 100 Ft.	Price Per Foot
⅛"	15	$0.22	1½"	200	$1.00
¼"	25	.23	2 "	260	1.40
⅜"	35	.25	2½"	430	2.20
½"	61	.30	3 "	550	3.00
¾"	76	.45	3½"	640	3.60
1 "	110	.65	4 "	830	4.20
1¼"	160	.90			

GOOSENECKS AND WALLPLATES





Goosenecks

Size	Carton	Price Each
½" x 18"	50	$0.40
½" x 20"	50	.42
½" x 24"	50	.45
½" x 30"	50	.50
½" x 36"	50	.55
Wallplates		
½"	50	.25

T & B RIGID CONDUIT FITTINGS

T & B CONDUIT BUSHINGS

Approved by Underwriters' Laboratories



Smoothly rounded shoulder covers end of conduit; broad base covers knockout hole. High ribs make tightening easy with fingers or with wrench.

Packed in neat, strong boxes, marked to show contents.

Cat. No.	Size In.	Std. Pkg.	Price Per 100	Cat. No.	Size In.	Std. Pkg.	Price Per 100
121	⅜	1000	**$8.40**	**128**	2½	30	**$60.00**
122	½	2500	**4.00**	**129**	3	25	**73.50**
123	¾	1000	**6.40**	**130**	3½	25	**150.00**
124	1	500	**10.20**	**131**	4	25	**185.00**
125	1¼	200	**11.20**	**133**	5	10	**370.00**
126	1½	100	**14.80**	**134**	6	10	**675.00**
127	2	50	**32.00**	------	------	----	----------

T & B CAPPED BUSHINGS

Approved by Underwriters' Laboratories

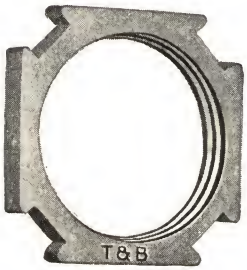
Make a workmanlike seal against dirt and mischief. Steel cap is crimped to inner surface of bushing. Quickly removable with a screw driver.



Cat. No.	Size Inches	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1460	½	100	2500	2½	**$ 7.70**
1461	¾	100	1000	4	**8.80**
1462	1	50	500	9	**13.20**
1463	1¼	25	200	12½	**21.00**
1464	1½	10	100	16	**25.50**
1465	2	10	50	20	**48.00**

T & B LOCKNUTS

Approved by Underwriters' Laboratories



Sizes ⅜- to 2-inch inclusive are made of steel and are notched. Sizes 2½ to 6-inch inclusive are made of malleable iron, extra heavy, not notched but ribbed.

Cat. No.	Size In.	Std. Pkg.	Price Per 100	Cat. No.	Size In.	Std. Pkg.	Price Per 100
140	⅜	1000	**$3.70**	**147**	2½	30	**$27.25**
141	½	2500	**2.25**	**148**	3	25	**42.00**
142	¾	1000	**2.55**	**149**	3½	25	**81.50**
143	1	500	**4.65**	**150**	4	25	**105.00**
144	1¼	200	**6.00**	**152**	5	10	**230.00**
145	1½	100	**7.35**	**153**	6	10	**440.00**
146	2	50	**14.70**	------	------	----	----------

T & B RIGID CONDUIT FITTINGS

CHASE NIPPLES

Approved by Underwriters' Laboratories



To connect conduit to a box with an ordinary coupling. Provides more wiring space and allows box to be removed without disturbing conduit. A Chase Nipple and a locknut will hold two boxes together, back to back.

Cat. No.	Size In.	Std. Pkg.	Price Per 100	Cat. No.	Size In.	Std. Pkg.	Price Per 100
840	¼	1000	**$20.75**	**847**	2	50	**$ 64.00**
841	⅜	1000	**20.75**	**848**	2½	20	**102.00**
842	½	500	**8.00**	**849**	3	10	**150.00**
843	¾	200	**9.60**	**850**	3½	5	**320.00**
844	1	100	**18.40**	**851**	4	5	**530.00**
845	1¼	100	**30.00**	**853**	5	5	**1410.00**
846	1½	50	**45.00**	------	--	--	----------

ERICKSON COUPLINGS

Approved by Underwriters' Laboratories

With an Erickson Coupling a conduit run may be completed when neither conduit can be turned. Or a run with an Erickson Coupling may be broken without taking down the whole run. Conduit joined is rigid and in line. Vibration does not loosen an Erickson Coupling.

Cat. No.	Size Inches	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
674	⅜	100	12	**$88.00**
675	½	100	24	**44.00**
676	¾	50	34	**56.50**
677	1	25	56	**105.00**
678	1¼	25	96	**211.00**
679	1½	25	112	**275.00**
680	2	20	175	**555.00**
681	2½	10	360	**1170.00**
682	3	10	380	**1820.00**
683	3½	5	500	**2880.00**
684	4	5	580	**3280.00**
686	5	2	1000	**6000.00**



T & B KNOCKOUT PLUGS

Approved by Underwriters' Laboratories

Made to fit tightly and stay. One blow on the convex side spreads the lugs and anchors plug in the hole. Patented.

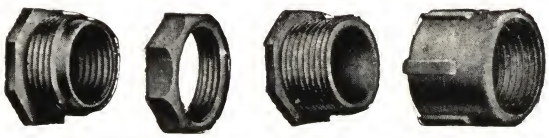


Cat. No.	Conduit Size	Wt. Lbs. Per 100	Price Per 100
1451	½ in.	2	**$4.40**
1452	¾ in.	2½	**5.70**

Standard package, 1000; unit package, 100.

T & B CONDUIT COUPLINGS

Approved by Underwriters' Laboratories



No. 1410 **No. 1420**

These couplings ae so designed that when assembled with conduit bodies, they constitute a complete body.

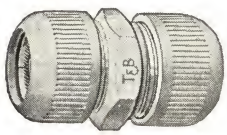
Cat. No.	Size Inches	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1410	½	25	100	10	**$33.50**
1420	¾	25	100	16	**53.00**

T & B CONDUIT FITTINGS

THREADLESS COUPLINGS AND CONNECTORS

For Heavy Wall Conduit

Approved by Underwriters' Laboratories



Coupling



Connector

For standard rigid conduit. Easy to tighten; made ready with fingers — then a turn with a wrench and the connection is permanent. Made of malleable iron and steel.

Couplings

Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
8120	½	50	100	22	**$ 65.50**
8220	¾	25	50	32	**96.00**
8320	1	5	25	52	**155.00**
8420	1¼	5	25	112	**232.00**
8520	1	2	10	150	**286.00**
8620	2	1	5	480	.....
8720	2½	1	5	480	.....
8820	3	1	5	700	.....
8850	3½	1	5	800	.....
8970	4	1	5	900	.....

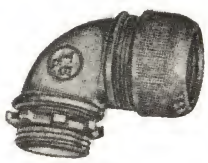
Connectors

8121	½	25	100	17	**43.25**
8221	¾	25	50	26	**70.50**
8321	1	5	25	44	**93.00**
8421	1¼	5	25	84	**170.00**
8521	1½	2	10	110	**235.00**
8621	2	1	5	180	.....
8721	2½	1	5	360	.....
8821	3	1	5	500	.....
8851	3½	1	5	600	.....
8971	4	1	5	630	.....

T & B THREADED AND THREADLESS SHORT ELBOWS



No. 4250



No. 8030

T & B Short Elbows (90° Angle Adapters) are well bushed, with clean machine-cut threads. Malleable iron. Tabolite galvanized inside and out. Conduit sizes: ½-inch to 2-inch.

Short Elbows (90° Adapters)

Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
4250	½	25	50	20	**$40.75**
4251	¾	25	50	30	**56.00**
4252	1	10	25	56	**86.50**
4253	1¼	10	25	92	**170.00**
4254	1½	10	25	108	**245.00**
4255	2	5	10	190	**430.00**

Threadless Short Elbow for Standard Rigid Conduit

8030	½	25	50	24	**$ 68.00**
8031	¾	25	50	34	**110.00**
8032	1	5	25	68	**245.00**
8033	1¼	2	10	130	**370.00**
8034	1½	2	10	160	**440.00**
8035	2	2	10	230	**665.00**

T & B CONDUIT FITTINGS

T & B BUSHED ELBOWS

Approved by Underwriters' Laboratories



Bushed Elbows are installed at the end of each under-floor conduit run, in such a manner that the floor coupling will be flush with the floor surface.

Made of malleable iron, heavily plated with Tabolite.

Cat. No.	Size	Radius In.	Offset In.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
460	½	1⅛	1⅛	10	50	20	**$54.50**
461	¾	1½	1½	10	50	42	**75.00**
462	1	1 13/16	1 13/16	5	25	84	**162.00**
463	1¼	2¼	2¼	5	10	150	**245.00**

T & B MALE CONDUIT ENLARGERS

Approved by Underwriters' Laboratories

For securing the next larger size of conduit in a knockout hole.



Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Price Per 100
1245	½– ¾	25	100	**$27.25**
1246	¾–1	25	50	**51.00**
1244	1 –1¼	5	50	**123.00**
1247	1¼–1½	5	25	**290.00**

T & B FEMALE CONDUIT REDUCERS

Approved by Underwriters' Laboratories

Designed to adapt an outlet to the next smaller size of conduit.



Cat. No.	Size In.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1250	¾– ½	50	100	9	**$32.00**
1251	1 – ¾	25	100	14	**44.75**
1252	1¼–1	25	50	22	**102.00**
1253	1½–1¼	25	50	22	**145.00**
1254	2 –1½	10	25	53	**265.00**
1255	2½–2	10	25	72	**480.00**
1256	3 –2½	10	25	160	**660.00**
1257	3½–3	5	10	165	**1060.00**
1258	4 –3½	5	10	200	**1320.00**

T & B PENNIES

Approved by Underwriters' Laboratories

Slip them inside the bushing and when the job is done, unscrew the bushing and the penny drops out. The best way to keep plaster, cement, nails, dirt, etc., out of conduit system while the job is in construction. Steel, Tabolite finish.



THE PENNY IN PLACE



THE PENNY

Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
815	½	500	1000	½	**$2.55**
816	¾	250	500	½	**3.05**
817	1	125	250	1	**5.10**
818	1¼	125	250	1	**10.60**
819	1½	50	100	2½	**13.20**
820	2	50	100	4	**15.20**
821	2½	50	100	5	**21.00**
822	3	50	100	8	**28.00**
823	3½	50	100	10	**36.75**
824	4	25	100	13	**48.00**

T & B RIGID CONDUIT FITTINGS

T & B INSULATED METALLIC BUSHINGS

Approved by Underwriters' Laboratories



Insulated Metallic Bushings line the ends of conduits and prevent cable abrasion and accidental grounds. Insulator is moisture proof paper base pheonlic thoroughly impregnated with tough insulating varnish.

Cat. No.	Size	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
575	½	50	100	3	**$19.20**
576	¾	25	50	6	**30.50**
577	1	5	20	10	**44.75**
578	1¼	5	20	10	**62.50**
579	1½	5	20	15	**80.00**
580	2	5	10	20	**106.00**
581	2½	5	10	20	**170.00**
582	3	1	5	60	.....
583	3½	1	5	60	.....
584	4	1	5	60	.....
586	5	....	1	100	.....
587	6	....	1	100	.....

UNION INSULATED CONDUIT END BUSHINGS

Listed by Underwriters' Laboratories, Inc.



Conduit End Bushings are molded of impact resistant bakelite. Sizes ½ inch through 1 inch from paper impregnated material; sizes 1¼ inches through 6 inches from canvas impregnated bakelite.

Provided with ribbed grip for easy tightening by hand or tool. Threads are smooth, concentric and free of burrs.

Cat. No.	Pipe Size Inches	Carton	Std. Pkg.	Wt. Lbs. Per 100	Std.Pkg. Price Per 100
CE-12	½	100	500	1½	**$3.00**
CE-34	¾	100	500	1	**4.00**
CE-1	1	50	250	2½	**6.30**
CE-114	1¼	25	100	4	**8.75**
CE-112	1½	25	100	6	**11.55**
CE-2	2	25	50	8	**22.00**
CE-212	2½	10	20	13	**36.50**
CE-3	3	5	10	16	**40.00**
CE-312	3½	5	5	20	**50.00**
CE-4	4	5	5	23	**60.00**
CE-412	4½	2	2	27	**110.00**
CE-5	5	2	2	32	**130.00**
CE-6	6	2	2	43	**250.00**

ADALET INSULATING COVERS; STEEL AND INSULATING LOCKNUTS

"SALI" COVERS FOR PIPE ENDS OR BUSHINGS



Blank Cover



3-Hole Cover

For use with deep type bushings at free pipe terminals to keep dust and foreign matter out of the conduits. Can be furnished with two or three holes, the two-hole covers being the same price as the three-hole covers, see below.

Blank Covers

Pipe Size In.	Catalog Number	Cart. Quan.	Wt. Lbs. Per 100	Price Per 100
½	**PEC- 20**	50	½	**$ 6.60**
¾	**PEC- 30**	50	¾	**7.80**
1	**PEC- 40**	50	¾	**9.00**
1¼	**PEC- 50**	10	2	**14.40**
1½	**PEC- 60**	10	2½	**16.80**
2	**PEC- 80**	10	4	**25.20**
2½	**PEC-100**	5	5½	**33.60**
3	**PEC-120**	5	8½	**44.40**
3½	**PEC-140**	1	14¼	**55.20**
4	**PEC-160**	1	19	**81.60**
4½	**PEC-180**	1	23	**94.80**
5	**PEC-200**	1	34	**110.40**
6	**PEC-240**	1	60	**147.60**

Three-Hole Covers

½	**PEC- 23**	50	¼	**$11.40**
¾	**PEC- 33**	50	¼	**13.80**
1	**PEC- 43**	50	½	**16.20**
1¼	**PEC- 53**	10	1¼	**25.20**
1½	**PEC- 63**	10	1¼	**30.00**
2	**PEC- 83**	10	2	**44.40**
2½	**PEC-103**	5	3	**58.80**
3	**PEC-123**	5	4	**78.00**
3½	**PEC-143**	1	7	**97.20**
4	**PEC-163**	1	11	**142.80**
4½	**PEC-183**	1	15	**166.80**
5	**PEC-203**	1	25	**193.20**
6	**PEC-243**	1	40	**258.00**



Type PEML



Type IN

TYPE PEML WITH STEEL LOCKNUTS

Pipe Size	Catalog Number	O.D. In.	Height *In.	Cart. Quan.	Weight Per 100	Price Per 100
⅛	**PEML-01**	⅝	13/32	100	.....	**$21.60**
¼	**PEML-02**	¾	29/64	100	.....	**21.60**
⅜	**PEML-03**	⅞	33/64	50	2	**21.60**
½	**PEML-2**	1 7/64	⅝	25	2¼	**24.00**
¾	**PEML-3**	1 5/16	⅝	25	4½	**30.00**
1	**PEML-4**	1⅝	49/64	25	5½	**40.80**
1¼	**PEML-5**	2	49/64	10	9½	**54.00**
1½	**PEML-6**	2¼	49/64	10	9½	**67.20**
2	**PEML-8**	2¾	49/64	10	13	**104.40**
2½	**PEML-10**	3¼	1 1/16	5	23¾	**156.00**
3	**PEML-12**	3⅞	1 1/16	5	47½	**229.20**
3½	**PEML-14**	4⅜	1 1/16	2	59½	**273.60**
4	**PEML-16**	5	1 1/16	2	72	**360.00**
4½	**PEML-18**	5½	1 1/16	1	103	**384.00**
5	**PEML-20**	6¼	1⅛	1	131	**462.00**
6	**PEML-24**	7¼	1⅛	1	166	**552.00**

*Height under shoulder.

TYPE IN INSULATING "SALI" LOCKNUTS

⅛	**IN-01**	⅝	11/64	50	¼	**$ 6.00**
¼	**IN-02**	¾	¼	50	½	**6.36**
⅜	**IN-03**	⅞	¼	50	½	**6.90**
½	**IN-2**	1 7/64	5/16	25	¾	**7.80**
¾	**IN-3**	1 5/16	5/16	25	1	**9.60**
1	**IN-4**	1⅝	25/64	25	1½	**12.00**
1¼	**IN-5**	2	25/64	10	2½	**14.40**
1½	**IN-6**	2¼	25/64	10	2½	**18.00**
2	**IN-8**	2¾	25/64	10	3¾	**27.90**
2½	**IN-10**	3¼	9/16	5	6¼	**48.00**
3	**IN-12**	3⅞	9/16	5	7½	**52.80**
3½	**IN-14**	4⅜	9/16	1	8¾	**69.00**
4	**IN-16**	5	9/16	1	11½	**86.40**

ADALET "SALI" AND PRECISION MOLDED INSULATING BUSHINGS

"SALI" INSULATING BUSHINGS



Type PE



Type PES

"Sali" (Superior Adalet Laminated Insulation) all-insulating bushings are strong and resilient. For use on conduits terminating at switchboards, control boards, power cabinets, pull boxes, motor starters, etc. Listed with Underwriter's.

Pipe Size	O.D. In.	THREADED TYPE—DEEP Catalog Number	Height In.	Wt. Lbs. Per 100	Price Per 100	THREADED TYPE—SHALLOW Catalog Number	Height In.	Wt. Lbs. Per 100	Price Per 100	Cart. Quan.
⅜	⅞	**PE-03**	33/64	1	**$15.60**	**PES-03**	13/32	¾	**$10.80**	50
½	1 7/64	**PE-2**	⅝	2	**15.60**	**PES-2**	15/32	1½	**10.80**	25
¾	1 5/16	**PE-3**	⅝	2½	**18.00**	**PES-3**	15/32	1¾	**13.20**	25
1	1⅝	**PE-4**	42/64	3	**26.40**	**PES-4**	19/32	3	**20.40**	25
1¼	2	**PE-5**	42/64	4½	**39.60**	**PES-5**	19/32	3¾	**30.00**	25
1½	2¼	**PE-6**	42/64	5½	**55.20**	**PES-6**	19/32	4½	**45.60**	25
2	2¾	**PE-8**	42/64	8	**62.40**	**PES-8**	19/32	7½	**51.60**	10
2½	3¼	**PE-10**	1	12½	**109.20**	**PES-10**	¾	10	**85.20**	5
3	3⅞	**PE-12**	1 1/16	17½	**134.40**	**PES-12**	13/16	16¼	**106.80**	5
3½	4⅜	**PE-14**	1 1/16	22	**148.80**	**PES-14**	13/16	19	**120.00**	2
4	5	**PE-16**	1 1/16	25	**232.80**	**PES-16**	13/16	23½	**192.00**	1
4½	5½	**PE-18**	1 1/16	37½	**249.60**	**PES-18**	13/16	31¼	**219.60**	1
5	6¼	**PE-20**	1⅛	55	**360.00**	**PES-20**	⅞	43¾	**302.40**	1
6	7¼	**PE-24**	1⅛	68	**372.00**	**PES-24**	⅞	56¼	**318.00**	1

Can be used with type PEC covers.



Types PET and SPE

SET SCREW TYPE FOR RIGID CONDUIT

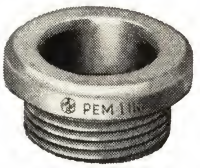
Can be used with type PEC cover.

Pipe Size	Catalog Number	O.D. In.	Height In.	Cart. Quan.	Wt. Lbs. Per 100	Price Per 100
½	**PET-2**	1 7/64	⅝	25	2	**$30.00**
¾	**PET-3**	1 5/16	⅝	25	2½	**34.80**
1	**PET-4**	1⅝	42/64	25	3¾	**42.00**
1¼	**PET-5**	2	42/64	10	5½	**57.60**
1½	**PET-6**	2¼	42/64	10	6¼	**69.60**
2	**PET-8**	2¾	42/64	10	8	**76.80**
2½	**PET-10**	3¼	1	5	12½	**127.20**
3	**PET-12**	3⅞	1 1/16	5	16¼	**153.60**
3½	**PET-14**	4⅜	1 1/16	2	18¾	**171.60**
4	**PET-16**	5	1 1/16	2	22	**224.40**
4½	**PET-18**	5½	1 1/16	1	37½	**234.00**
5	**PET-20**	6¼	1⅛	1	43¾	**360.00**
6	**PET-24**	7¼	1⅛	1	56¼	**480.00**

SET SCREW TYPE FOR E.M.T.

½	**SPE-2**	1 7/64	⅝	25	2¼	**$30.00**
¾	**SPE-3**	1 5/16	⅝	25	3	**34.80**
1	**SPE-4**	1⅝	42/64	25	4½	**42.00**
1¼	**SPE-5**	2	42/64	10	5½	**57.60**
1½	**SPE-6**	2¼	42/64	10	7½	**69.60**
2	**SPE-8**	2¾	42/64	10	9¼	**76.80**

MALE TYPE "SALI" BUSHINGS



Type PEM

A compact male bushing, recommended for insulating cables and/or wires passing through steel cabinet walls, outlet boxes, etc.

Pipe Size	Catalog Number	O.D. In.	Height In.	Cart. Quan.	Wt. Lbs. Per 100	Price Per 100
⅛	**PEM-01**	⅝	13/32	100	½	**$19.20**
¼	**PEM-02**	¾	29/64	100	½	**19.20**
⅜	**PEM-03**	⅞	33/64	50	¾	**19.20**
½	**PEM-2**	1 7/64	⅝	25	1¼	**20.40**
¾	**PEM-3**	1 5/16	⅝	25	1½	**25.20**
1	**PEM-4**	1⅝	42/64	25	2½	**33.60**
1¼	**PEM-5**	2	42/64	10	3	**40.80**
1½	**PEM-6**	2¼	42/64	10	3¼	**51.60**
2	**PEM-8**	2¾	42/64	10	5½	**62.40**
2½	**PEM-10**	3¼	1 1/16	5	10	**108.00**
3	**PEM-12**	3⅞	1 1/16	5	13¾	**157.20**
3½	**PEM-14**	4⅜	1 1/16	2	18¾	**171.60**
4	**PEM-16**	5	1 1/16	2	25	**244.80**
4½	**PEM-18**	5½	1 1/16	1	31	**259.20**
5	**PEM-20**	6¼	1⅛	1	31	**308.40**
6	**PEM-24**	7¼	1⅛	1	41	**337.20**

*Height under shoulder.

The type PEM male bushing can be furnished with steel locknut as Adalet type PEML. Available in all sizes listed above.

ADALET PRECISION MOLDED INSULATING BUSHINGS



Type AM

Can be used with type PEC cover.

High strength — high dielectric. Listed by Underwriters. Fulfills National Electrical Code requirements. Reinforced bakelite. NEMA standard threads.

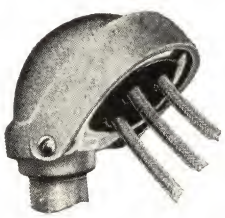
Pipe Size	Catalog Number	Std. Pkg.	Cart. Quan.	Wt. Lbs. Per 100	Price Per 100
½	**AM2**	400	100	1	**$ 5.06**
¾	**AM3**	400	100	1½	**6.33**
1	**AM4**	200	50	2½	**10.12**
1¼	**AM5**	100	25	4	**26.50**
1½	**AM6**	100	25	6	**30.00**
2	**AM8**	60	15	8	**36.00**
2½	**AM10**	20	5	13	**58.50**
3	**AM12**	20	5	16	**64.00**
3½	**AM14**	5	5	20	**80.00**
4	**AM16**	5	5	23	**96.00**
5	**AM20**	2	2	27	**210.00**
6	**AM24**	2	2	43	**400.00**

T & B ENTRANCE FITTINGS

T & B ENTRANCE CAPS

For Standard Rigid Conduit

Approved by Underwriters' Laboratories



May be used in both vertical and horizontal positions with entrance holes always 45° from the weather.

Insulator is of heavy composition, moulded to set in the frame. Cap is hot galvanized; frame Tabolited.

Cat. No.	Size In.	Holes In Insulator	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1525	½	4	10	50	68	**$ 59.00**
1521	¾	5	5	50	84	**73.50**
1522	1	5	5	25	136	**102.00**
1523	1¼	5	1	10	220	.....
1524	1¼	7	1	10	240	.....
1529	1½	4	1	5	240	.....
1530	2	4	1	5	1200	.....
1531	2½	4	1	1	1600	.....
1532	3	6	1	1	2900	.....
1533	3½	6	1	1	2800	.....
1534	4	6	1	1	2800	.....

T & B ENTRANCE ELLS

For Standard Rigid Conduit

Approved by Underwriters' Laboratories

Designed for a straight pull in either direction. It mounts flush on the wall, eliminating any need for bending conduit.

There are no sharp edges—everything is carefully bushed to protect the cable. Cover is held in place with one screw which does not come out. A turn of the screw, and the cover slips out. Made of heavy cast iron and plated with Tabolite.



Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt.Lbs. Per 100	Price Per 100
1490	½	5	50	76	**$ 83.00**
1491	¾	5	50	88	**101.00**
1492	1	5	25	136	**157.00**
1493	1¼	5	10	260	**305.00**
1494	1½	1	5	360	.....
1495	2	1	1	520	.....
1496	2½	1	1	400	.....
1497	3	1	1	1200	.....

T & B CAPPED ELBOWS

For Standard Rigid Conduit

Approved by Underwriters' Laboratories

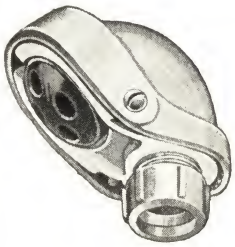


Eliminate fishing of wires through sharp bends. They are smooth on the interior, all openings bushed to prevent abrasion. Made of cast iron, plated with Tabolite to resist corrosion.

Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt.Lbs. Per 100	Price Per 100
1480	½	10	50	46	**$ 73.50**
1481	¾	5	50	62	**93.00**
1482	1	5	25	64	**120.00**
1483	1¼	5	10	200	**360.00**
1484	1½	2	5	320	**530.00**

T & B ENTRANCE FITTINGS

T&B ENTRANCE CAPS FOR EMT



The T & B Entrance Cap for thinwall conduit is the standard T & B Entrance Cap for heavywall conduit, with a thinwall conduit connector built-in at the base. Furnished with a heavy composition insulator. Made of heavy cast-iron, plated with Tabolite superior galvanizing. 4 hole insulator.

Cat. No.	Size Inches	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5525	½	10	50	74	**$ 93.00**
5526	¾	5	50	104	**102.00**
5527	1	5	25	160	**145.00**
5528	1¼	1	10	140	.....

WATERTIGHT SERVICE ENTRANCE CABLE CONNECTORS

Strain-Relief Bushings



Hex-Gland Type



Two-Screw Type

Hex-Gland Type: Full hex gland for easier tightening; clean cut threads. Beveled ends of rubber bushing form a snug watertight fit on cable. Only commonly used sizes listed below. Color-coded rubber bushing for quick identification.

Two-Screw Type: Easily tightened on the cable by two screws. The cap gives maximum protection to the rubber bushing. Both cap and body are smooth, accurate die castings. Color coded for size.

Two Conductor (Round Cables)

Cable Size	Cable Type	Hex Nut Type ½" Thread	Hex Nut Type ¾" Thread	Hex Nut Type 1" Thread	2 Screw Type ¾" Thread	2 Screw Type 1" Thread
2-#12, 2-#10	ASE	2103	2203	2303	.....	.....
	SE	2102	2202	2302	.....	.....
	SD	2101	2201	2301	.....	.....
2-#8, 1-#8, 1-#10	ASE, SE	2104	2204	2304	2504	2604
	SD	2103	2203	2303	2504	2604
2-#6, 1-#6, 1-#8	ASE, SE	2104	2204	2304	2504	2604
	SD	2103	2203	2303	2504	2604
2-#4, 1-#4, 1-#6	ASE, SE	.....	2206	2306	.....	.....
	SD	2205	2205	2305	.....	.....
2-#2, 1#2, 1-#4	ASE, SE	.....	2207	2307	.....	.....
	SD	.....	2206	2306	.....	.....

Three Conductor (Oval Cables)

3-#12	ASE	.....	2212	2312	.....	.....
	SE, SD	2111	2211	2311	.....	.....
3-#10, 2-#10, 1-#12	ASE	.....	2213	2313	.....	.....
	SE	.....	2212	2312	.....	.....
	SD	2111	2211	2311	.....	.....
3-#8, 2-#8, 1-#10	ASE, SE	.....	2214	2314	2514	2614
	SD	.....	2213	2313	2514	2614
3-#6, 2-#6, 1-#8	ASE, SE	.....	.....	2325	.....	2625
	SD	.....	2214	2314	2514	2614
3-#4, 2-#4, 1-#6	ASE, SE	.....	.....	2327	.....	2627
	SD	.....	.....	2325	.....	2625
3-#2, 2-#2, 1-#4	ASE	.....	.....	2343-1¼" thread		
	SE, SD	.....	.....	2342-1¼" thread		

Standard package, 100; carton quantity, 10.

T & B SERVICE ENTRANCE FITTINGS

SERVICE ENTRANCE CAPS

Approved by Underwriters Laboratories

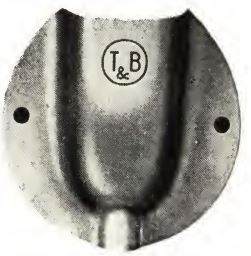


Has only two parts, weatherproof aluminum cap and phenolic insulator. One clamping screw holds the cable and insulator, and grounds the cap to the bare neutral. The deep hood shields the end of the cable from all weather. One-screw mounting. One-piece molded composition insulator eliminates threading of conductors.

Cat. No.	Maximum Cable Size	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5549	2-#6	5	50	16	$50.50
5550	3-#6 or 3-#8	5	50	20	66.50
5551	3-#4 or 3-#8	5	50	30	73.50
5536	3-#2	2	10	80	176.00

ALUMINUM WALL PLATE

Approved by Underwriters Laboratories



Made of solid formed aluminum. Accommodates a maximum of 3—#4 wires in the service cable and a maximum of 1—#4 for ground connection. Furnished plain or with non-drying Dux Seal Caulking Compound. Complete with 2—#8 screws.

Cat. No.	Cable Size	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5545	Serv. Cable Max. 3W4	10	100	9	$24.00
5546*	Serv. Cable Max. 3W4	10	100	11	32.00

*Wall plate with Dux Seal.

FLANGED BUILDING HEADS

Approved by Underwriters' Laboratories



Especially recommended for use in out-building service entrances in accordance with REA specifications.

The cap is made of aluminum. The phenolic plastic insulator has five holes, two of which are plugged. Furnished with two wood screws.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
5570	No Rain-Seal Compound	6	24	38	$88.00
5571	With Rain-Seal Compound	6	24	38	91.00

CABLE STRAPS



No. 1341



No. 1345

Designed to take the entire range of Service Entrance Cable. Thev do the work formerly covered by eleven old style straps. Malleable iron.

Cat. No.	Cable Size	Unit Pkg.	Std. Pkg.	Wt.	Price Per 100
1341	2W12, 2W10, 2W8, 2W6, 3W12	50	100	3	$4.65
1344	2W4, 3W10, 3W8, 3W6	50	100	5	5.10
1345	2W2, 3W4, 3W2	50	100	6½	5.45

MINERALLAC JIFFY CLIP



Made in Everdur and zinc-plated steel to meet the demand for a substantial clamp for hanging pipe, conduit and lead covered cables. With this clip only one screw or bolt is required to hold the pipe, conduit or cable and clip firmly in place. It is made to afford great strength without being heavy or bulky, by having ribs drawn in the clip. A round boss is also raised on the clip, through which is a hole for the screw or bolt. This boss serves the purpose of a lock washer to prevent the clip from working loose.

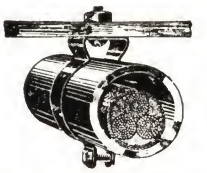
By use of this clip the labor as well as the clip cost is greatly reduced and at the same time a very neat and substantial job is possible. Made for various sizes of conduit and pipe as specified.

Cat. No.	Size, In. Rigid	Size, In. Thin Wall	I.D. Jiffy Clip Rigid	I.D. Jiffy Clip Thin Wall	Std. Pkg.	Appr. Lb. Std. Pkg.	Price Steel	Price Per 100 Everdur
105	.....	.....	.250	.....	500	3½	$0.80	$2.55
110	.....	.....	.312	.....	500	3½	.90	2.65
115	.....	.....	.375	.....	500	6¾	1.05	2.75
120	⅛	.....	.405	.....	500	7	1.15	2.95
125	¼	.....	.540	.....	500	8¼	1.25	3.45
130	⅜	½	.675	.706	100	3¼	1.50	5.45
140	½	.....	.840	.....	100	4¼	1.60	6.90
145	.....	¾	.....	.922	100	4½	2.00	7.90
150	¾	.....	1.050	.....	100	5	2.30	8.90
155	.....	1	.....	1.165	100	5¼	2.80	11.90
160	1	.....	1.315	.....	100	9	3.40	14.80
170	1¼	.....	1.660	.....	100	13½	4.50	19.80

Shipment in standard package only.

MINERALLAC HANGERS

FOR CONDUIT AND CABLE



These hangers are made of zinc-plated steel or Everdur metal, and are much stronger than cast iron hangers for the same purpose. They are easily and quickly put in place, so open wiring, conduit and cable may be run with greater rapidity and be more compactly arranged than by the use of other hangers.

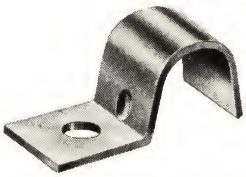
These hangers have been approved by the Underwriters' Laboratories for use on circuits up to 300 volts when mounted directly on the surface wired over. For voltages from 300 to 550 volts these hangers must be installed with spacers under the base of the hanger or mounted on metal racks or brackets so as to hold the conductors at least one inch from the surface wired over. For voltages above 550 volts the hangers should be used with an appropriate insulating bushing having necessary dielectric strength, the hangers being mounted on metal racks or brackets to hold the conductors far enough from the surface wired over to preserve the required electrical clearance.

Cat. No.	Conduit Size Rigid	Conduit Size Thin Wall	O.D. Conduit Rigid	O.D. Conduit Thin Wall	Opening Inches Min.	Opening Inches Max.	Price Per 100 Steel	Price Per 100 Everdur
0	⅜, ½	½	.675 / .840	.706	⅝	27/32	$4.15	$9.45
1	¾	¾	1.050	.922	13/16	1 1/16	4.55	11.55
2	1	1	1.315	1.163	1 1/16	1 11/32	6.05	16.55
2½	.....	1¼	.....	1.503	1 3/32	1½	6.35	17.30
3	1¼	1½	1.660	1.738	1½	1 11/16	6.60	18.60
4	1½	.....	1.900	.....	1 11/16	1 31/32	8.15	26.45
5	2	2	2.375	2.195	2 3/32	2 15/32	8.80	38.80
6	2½	.....	2.875	.....	2 11/16	3	9.75	47.15
7	3	.....	3.50	.....	3¼	3¾	10.85	50.90

T & B RIGID CONDUIT FITTINGS

T & B STEEL PIPE STRAPS

Approved by Underwriters' Laboratories



Formed from heavy gauge steel, they fit the conduit precisely. Hot dip galvanized zinc is the standard finish.

Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
65*	¼	100	500	3	$ 3.70
1210	⅜	100	500	7	6.55
1211	½	100	500	10	6.25
1212	¾	50	500	14	8.30
1213	1	50	100	21	12.80

T & B MALLEABLE IRON PIPE STRAPS

Approved by Underwriters' Laboratories

Designed to fit each size of conduit snugly. High reinforcing ribs on each size increase the strength, reduce the weight. Hot dip galvanized finish.



Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
1275	⅜	100	500	5	$ 7.20
1276	½	100	500	7	6.55
1277	¾	50	500	9	8.80
1278	1½	50	100	15	13.40
1279	1¼	25	100	22	20.25
1280	1½	25	50	28	24.75
1281	2	10	25	80	54.50
1282	2½	10	25	116	88.00
1283	3	10	25	136	133.00
1284	3½	5	10	200	176.00
1285	4	5	10	260	400.00
1287	5	2	5	500	1150.00

ADJUSTABLE CONDUIT HANGERS AND SUPPORTS

These hangers will fit any flange from 3¾ to 12 inches. They are universal in the range of beam flanges they will fit, the number of pipes they will accommodate, and the various angles at which the pipe may be run. They are adjustable for varying plaster lines, and will support any number of conduits from one to four.



Beam Clamps

No. 700—Fits flanges from 2¾ to 7⅜ inches, including bolts; standard package, 100. Weight per 100, 32 pounds.

Price per 100....**$110.00**

No. 701—Fits flanges from 7 to 12 ins., including bolts; standard package, 100; Weight, 58 lbs. Price per 100.....**$175.00**

No. 703—Bolt and 3 nut, standard package 100; weight, 6 lbs. Price per 100.....**$18.80**

Conduit Supports

Cat. No.	Size Conduit	Std. Pkg.	Price Per 100	Cat. No.	Size Conduit	Std. Pkg.	Price Per 100
733	1— ½"	100	$31.25	741	2— ½"	100	$62.50
734	1— ¾"	100	37.50	743	2— ¾"	50	75.00
735	1—1"	50	62.50	745	2—1"	35	125.00
736	1—1¼"	50	69.00	746	2—1¼"	25	163.00
737	1—1½"	25	75.00	747	2—1½"	25	181.00
738	1—2"	25	125.00				
739	1—2½"	25	138.00	742	4— ½"	100	106.00
740	1—3"	25	163.00	744	4— ¾"	50	120.00

T & B RIGID CONDUIT FITTINGS

T & B CONDUIT SUPPORTS



These supports will fit any beam flange up to ⅝-inch thick. They can be used on all the popular sizes and types of beams. The pointed set screw bites into the beam, insuring permanent tightness and a good electrical ground.

Tough malleable iron body. Holds standard rigid conduit or EMT.

Cat. No.	Size for Conduit, Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
690	½	10	100	40	$105.00
691	¾	10	100	43	115.00
692	1	10	50	55	123.00
693	1¼	10	50	60	170.00

T & B CABLE CLIPS



For Armored Cable—Made from galvanized round steel wire. Needle sharp points will stick even in hard wood when pushed in with fingers.

For Non-metallic Sheathed Cable — All inside surfaces are rounded to prevent damage to cable. Shorter than No. 90, this clip suits the smaller diameter of unarmored cable. Will hold 2 #14, 3 #14, 2 #12, 3 #12, 2 #10, or 3 #10.

For Armored Cable

Cat. No.	Size Inches	Standard Package	Wt. Lbs. Per 100	Price Per 1000
90	⅜	10,000	13½	$5.45

For Non-Metallic Sheathed Cable

91	⅜	10,000	12	4.95

THOMPSON CONDUIT STRAPS

Galvanized—Two-Hole Style



Strap Size — For Rigid Conduit: ⅛ to 5-in. IPS. For Thin-Wall Conduit: ½ to 2-in. TW.

NON-METALLIC SHEATHED CABLE STRAPS

For 14-2 and 12-2 Wire



NMC Romex—Type R, NMC Romex—Type T.

YOUR ELECTRICAL

REQUIREMENTS ALWAYS

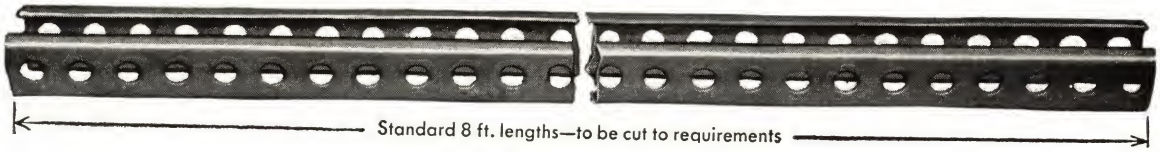
GET OUR PROMPT,

CAREFUL ATTENTION

KINDORF DEVICES

No. 100 KINDORF CHANNEL

12 gauge steel—Wt. 0.6 lbs. per ft.—80 ft. per pkg. (bundle)
8 ft. lengths standard—other lengths to order
All holes $\frac{17}{32}$" diam.—on 1-inch centers
Price Per 100 Ft.—Electro-Galv.—$25.00

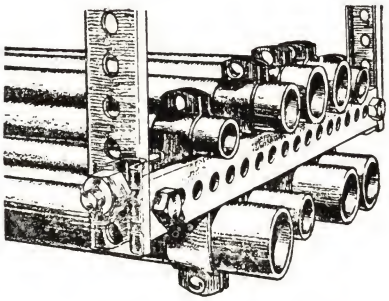




No. 101 CHANNEL TYPE SPACER

⅛" steel—Wt. 0.16 lbs.—100 per pkg.
Used with two sections of CHANNEL to form an assembly with two continuous slots which accept KINDORF Pipe or Conduit STRAPS—and connects to suspended CHANNEL supports in one or several tiers.
To install use 2–½" x 2¼" Bolts.

Price Per 100—Electro-Galv. **$14.00**

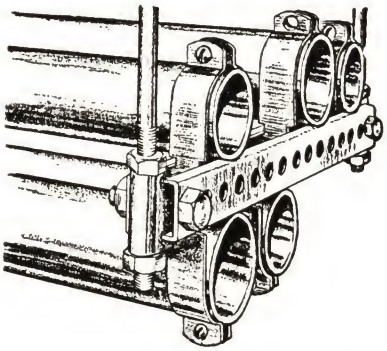


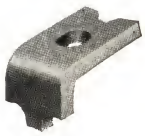


No. 102 BOLT TYPE SPACER

⅛" steel—Wt. 0.19 lbs.—100 per pkg.
Used with two sections of CHANNEL to form an assembly with two continuous slots which accept KINDORF Pipe or Conduit STRAPS. May be suspended by hanger rods or fastened to studs for ceiling runs, for vertical or horizontal wall runs.
To install use 1–½" x 2¼" Bolt.

Price Per 100—Electro-Galv. **$14.00**

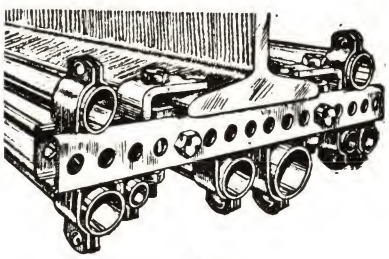




No. 103 BEAM CLAMP

$\frac{5}{16}$" steel—Wt. 0.28 lbs.—100 per pkg.
Used with two sections of No. 100 CHANNEL and two No. 102 BOLT SPACERS to form an assembly with slots (for Kindorf Straps), which clamps to all sizes of I-beams where edge of beam-flange does not exceed .80 inch thickness.
To install use 1–½" x 3½" Bolt.

Price Per 100—Electro-Galv. **$16.00**





No. 104 ANGLE CONNECTOR

¼" steel—Wt. 0.33 lbs.—100 per pkg.
Used to connect suspended CHANNEL to ½" studs. It is recommended that only short studs be used. Note the vertical adjustment provided. Also used as a side beam clamp, etc.
To install use 1–½"x 1" Bolt.

Price Per 100—Electro-Galv. **$17.00**



All Combinations of Above Fittings Assemble with Only 3 Lengths of ½" Bolts

KINDORF DEVICES



These straps fit in slot of No. 100 Channel Assembly or No. 140 Hangers and holds conduit rigidly in place. Straps furnished with $\frac{5}{16}$" x 1¼" round head machine screw and nut.

Straps made of ⅛" x 1¼" steel.

No. 105 RIGID CONDUIT STRAPS

Conduit Size	Units per Package	Wt. Lbs. per 100	Price per 100 Electro-Galv.
⅜"	100	19	**$15.00**
½"	100	21	**17.00**
¾"	100	23	**19.00**
1 "	100	26	**21.00**
1¼"	100	29	**24.00**
1½"	100	32	**27.00**
2 "	100	37	**30.00**
2½"	100	43	**34.00**
3 "	100	51	**38.00**
3½"	50	58	**42.00**
4 "	50	65	**46.00**
5 "	50	75	**50.00**
6 "	50	89	**55.00**
8 "	50	100	**65.00**

No. 106 THIN-WALL TUBING STRAPS

Tubing Size	Units per Package	Wt. Lbs. per 100	Price per 100 Electro-Galv.
⅜"	100	15	**$15.00**
½"	100	17	**17.00**
¾"	100	19	**19.00**
1 "	100	21	**21.00**
1¼"	100	24	**24.00**
1½"	100	27	**27.00**
2 "	100	32	**30.00**

No. 113 HEX HEAD MACHINE BOLTS (Less Nuts)

Size	Units per Package	Wt. Lbs. per 100	Price per 100 Electro-Galv.
½" x 1 "	100	9.55	**$6.00**
½" x 2¼"	100	16.05	**9.00**
½" x 3½"	100	22.90	**12.00**

No. 114 HEAVY HEXAGON ½" NUTS

Price Per 100—Electro-Galv.—$5.00

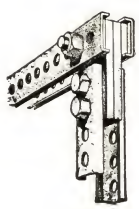


No. 120—SADDLE TYPE SPACER

Permits ½" hanger rod to be suspended from any point in slot of No. 100 CHANNEL assembly.

Price Per 100—Electro-Galv.—**$7.00**

No. 122—"T" TYPE SPACER



Used to support an assembly of No. 100 Channel with vertical slot, from a horizontal assembly of No. 100 Channel. Spacer is slotted for adjustment to any position.

Weight—1.6 lbs. each.

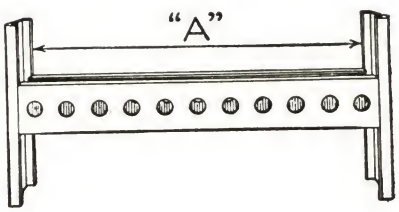
Price Per 100—Electro-Galv.—$130.00

LOAD-SPAN TABLE

For No. 100 Kindorf Channel

Span Length "A"	Deflection in Inches	Uniformly Distributed Load—Standard Span	Uniformly Distributed Load—Doubled Span
12"	0.033	3000 lbs.*	3000 lbs.*
18"	0.05	2200 lbs.	3000 lbs.*
24"	0.066	1700 lbs.	3000 lbs.
30"	0.083	1300 lbs.	2600 lbs.
36"	0.1	1000 lbs.	1850 lbs.
42"	0.117	800 lbs.	1400 lbs.
48"	0.133	650 lbs.	1100 lbs.
54"	0.150	550 lbs.	900 lbs.
60"	0.167	450 lbs.	750 lbs.
66"	0.183	400 lbs.	650 lbs.
72"	0.2	350 lbs.	600 lbs.

*Ratings limited to 3000 lbs. due to tensile strength of standard vertical supports.



For concentrated center load divide above ratings by two (2).

Spans more than 18" long shall have through-bolts 15" apart and not more than 15" from each end.

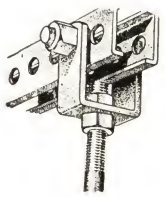
RIGID CONDUIT DATA

Nominal Size Rigid Conduit	Outside Diameter of Conduit	Maximum Weight Lbs. per Foot*
½"	.840"	1.172
¾"	1.050"	1.754
1 "	1.315"	2.614
1¼"	1.660"	4.311
1½"	1.900"	5.891
2 "	2.375"	8.528
2½"	2.875"	11.509
3 "	3.500"	16.506
3½"	4.000"	19.052
4 "	4.500"	24.749
5 "	5.563"	35.870
6 "	6.625"	50.685

*Maximum weight equals weight of Rigid Conduit plus weight of heaviest Conductor Combination.

KINDORF DEVICES

No. 126 SWING CONNECTOR



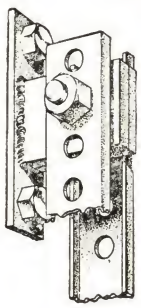
Swivel bolt furnished with lock-type nuts.

Maximum recommended load rating 1200 lbs.

Weight 0.65 lbs. each.

Price per 100—
Electro-Galv. $52.00

No. 134 WALL BRACKET



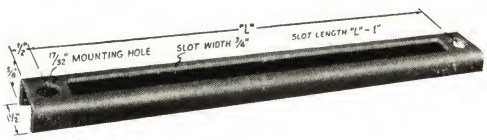
Used in a No. 100 Channel Assembly for supporting heavy horizontal runs of conduit.

Made of welded steel.

Weight 1.6 lbs. each.

Pirce per 100—
Electro-Galv. $105.00

No. 140 SLOTTED CONDUIT HANGER

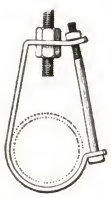


To be used with No. 105 or No. 106 straps to support conduit, etc.

Packed 50 per package.

Size Length "L"	Uniformly Distributed Load Rating	Wt. Lbs. per 100	Price per 100 Electro-Galv.
6"	640	44	**$23.00**
8"	480	50	**28.00**
12"	320	70	**38.00**
16"	240	85	**48.00**
20"	180	100	**58.00**
24"	160	120	**68.00**

No. 150 ADJUSTABLE CONDUIT HANGER

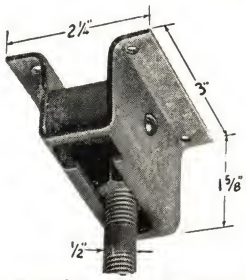


1. Provides temporary support—saves time.
2. Vertical adjustment range of 1½" or more.
3. Easily adjusted after pipe is in place.
4. No loosening due to vibration.

All Hangers made for ½" rods. Hanger Rod and Hanger Rod Nuts to be ordered separately.

Size Conduit	Units per Package	Wt. Lbs. per 100	Price per 100 Electro-Galv.
½"	50	40	**$27.00**
¾"	50	44	**29.00**
1 "	50	46	**31.00**
1¼"	50	48	**33.00**
1½"	50	52	**36.00**
2 "	50	56	**37.00**
2½"	50	96	**51.00**
3 "	50	108	**56.00**
3½"	20	115	**61.00**
4 "	20	165	**80.00**
5 "	20	185	**87.00**
6 "	20	225	**102.00**
8 "	20	350	**160.00**

No. 155 CONCRETE INSERT (Steel)



Weight 0.54 lbs. each.

50 per pkg.

Easily nailed in place with 8-penny nails.

Lateral adjustment 1¼ inches.

No. 155 INSERT can be furnished with base extensions for fastening to forms with screws or bolts.

Price per 100—Galvanized.....$25.00

Price per 100—with Base Extensions—
Galvanized 30.00

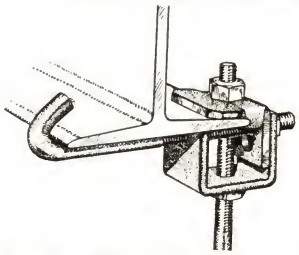
No. 157 SQUARE ½" INSERT NUT

Price per 100—Electro-Galv. $5.00

No. 158 SPECIAL ⅜" INSERT NUT

Price per 100—Electro-Galv. $5.00

No. 160 ADJUSTABLE BEAM CLAMP



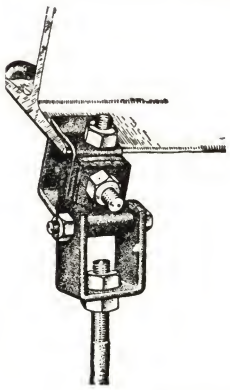
Clamps solidly to all sizes and types of I-beams where edge of beam-flange does not exceed .80-inch thickness.

Hook Rod is furnished in standard length of 8" with 4¾" of thread, to fit all beams up to 6" flange width.

½" hanger rods and nuts to be ordered separately.

Approx. weight 1.0 lb. Packed 25 per package.
LOAD RATING=500 lbs.

Price per 100—Electro-Galv. $65.00



No. 165 BEAM CLAMP—WITH SWING CONNECTOR

BEAM CLAMP identical with No. 160 above, with SWING CONNECTOR added.

Eliminates bending of hanger rod — when suspending from purlins.

½" hanger rod and nuts to be ordered separately.

Approx. weight 1.8 lbs. Packed 25 per package.

Price per 100—
Electro-Galv. $125.00

No. 170 SWINGING HANGER FLANGE



Flange has four 13/32" holes for installation with wood screws, or ⅜" bolts.

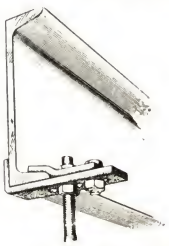
½" hanger rod and nuts to be ordered separately.

Approx. weight 1.2 lbs. Packed 50 per package.

Price per 100—Electro-Galv. $70.00

KINDORF DEVICES

No. 177 ADJUSTABLE CHANNEL CLAMP



Adjustable to fit all Structural Channels with a Maximum Flange width of 3¼". Adjustable to fit all Structural Angles with leg up to 3" long and not over ⅜" thick.

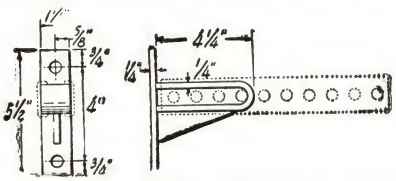
½" Hanger Rod and Nuts to be ordered separately.

Approx. weight 2.0 lbs. Packed 25 per package.

LOAD RATING=500 lbs.

Price per 100—Electro-Galv. **$110.00**

No. 181 STEEL WALL BRACKET



This bracket assembly with its two continuous slots offers many combinations for supporting single and multiple runs of conduit.

Bracket is furnished standard less No. 100 channel.

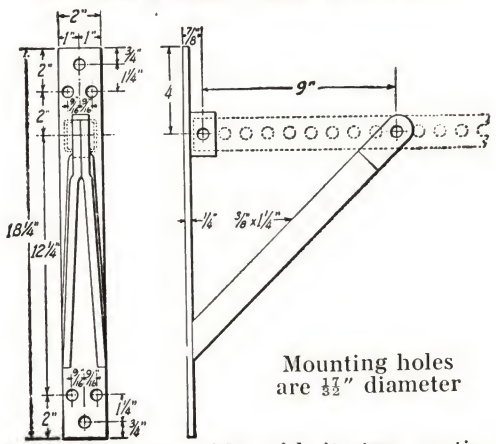
Mounting holes are $\frac{17}{32}$" diameter.

Weight 1.5 lbs. each.

End Load Rating, 12" No. 100 Channel, 400 lbs.

Price per 100—Electro-Galv. **$160.00**

No. 182 STEEL WALL BRACKET



Mounting holes are $\frac{17}{32}$" diameter

This bracket assembly with its two continuous slots offers many combinations for supporting single and multiple runs of conduit.

Bracket is furnished standard less No. 100 channel.

Weight 5.8 lbs. each.

End Load Rating, 18" No. 100 Channel, 480 lbs.

Price per 100—Electro-Galv. **$430.00**

Brackets bolted to a wall should have a back plate if heavily loaded. It is recommended that each ½" bolt embedded in a concrete wall be limited to a 500 pound load. This load limitation is due to shear of concrete.

No. 190 HANGER RODS—½" DIAMETER



Size A	"B"	"C"	Wt. Lbs. per 100	Price per 100 Electro-Galv.
2	*	*	11	**$13.00**
3	*	*	16	**14.00**
4	*	*	21	**15.00**
6	4"	1½"	33	**16.00**
8	4"	3"	45	**20.00**
10	4"	5"	56	**24.00**
12	4"	6"	67	**29.00**
14	4"	6"	78	**34.00**
18	4"	10"	100	**44.00**
24	4"	10"	134	**52.00**
30	4"	10"	167	**60.00**
36	4"	10"	200	**68.00**
42	4"	10"	234	**76.00**
48	4"	10"	267	**84.00**
54	4"	10"	300	**92.00**
60	4"	10"	334	**100.00**
66	4"	10"	367	**108.00**
72	4"	10"	400	**116.00**

*Continuous thread. Each size packed 25 per package.

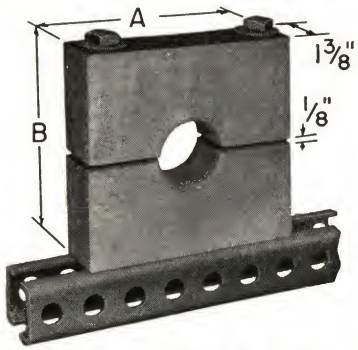
No. 287 "U" BOLTS



Conduit Size	Steel Size	Units per Package	Price per 100 Electro-Galv.
½"	⅜"	100	**$18.00**
¾"	⅜"	100	**19.00**
1 "	⅜"	100	**20.00**
1¼"	⅜"	100	**21.00**
1½"	⅜"	100	**22.00**
2 "	⅜"	100	**24.00**
2½"	½"	50	**38.00**
3 "	½"	50	**42.00**
3½"	½"	25	**45.00**
4 "	½"	25	**50.00**

Furnished with two hex nuts.

No. 750 MAPLE CABLE CLAMPS



Clamps furnished with ⅜" bolts and special nuts for installation on a No. 100 Kindorf Channel Assembly.

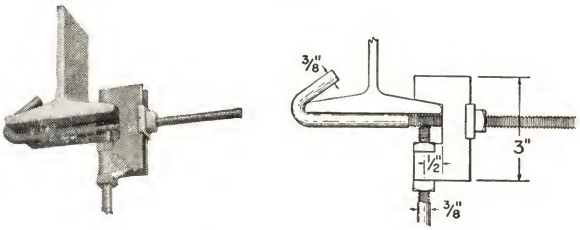
Note: Orders must specify exact O.D. of cable to be supported.

Size No.	O.D. of Cable	Wt. Lbs. per 100	Price per 100 Electro-Galv.
1	Up to 0.99"	90	**$190.00**
2	1" to 1.49"	100	**215.00**
3	1.5" to 1.99"	120	**240.00**
4	2" to 2.49"	140	**265.00**
5	2.5" to 2.99"	160	**290.00**
6	3" to 3.99"	200	**315.00**
7	4" to 4.99"	240	**340.00**

KINDORF B-SERIES CONDUIT HANGERS

No. 1230 I-BEAM CLAMP

⅛" Steel—Wt. Ea. 0.6 Lbs.—Packed 50 Per Pkg.
Load Rating—500 Lbs.

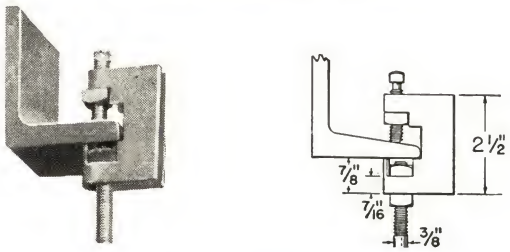


Clamps to all I-Beams where edge of beam flange does not exceed .80-inch thickness. Hook Rod is furnished in standard length of 8 in. with 4¾ in. of thread—to fit beams up to 6 in. flange width. Hanger rod and nuts to be ordered separately.

Price per 100—Electro-Galv. **$42.00**
For Hook Rods 12 in. long, add **$10.00** per 100.

No. 1231 STRUCTURAL STEEL CLAMP

⅛" Steel—Wt. Ea. 0.3 Lbs.—Packed 50 Per Pkg.
Load Rating—300 Lbs.

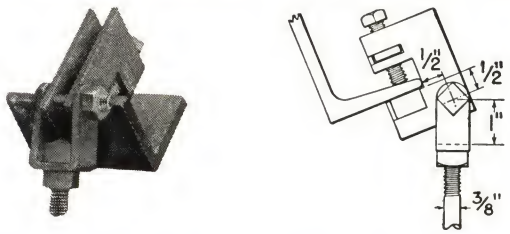


Clamps to I-Beams, Channels, Angles and Columns, where flange does not exceed .80-in. in thickness. Clamp includes ⅜-in. cup point set screw with nut. Hanger rod and hanger rod nuts, Anchor Clips and Conduit Straps to be ordered separately.

Price per 100—Electro-Galv. **$25.00**

No. 1232 CLAMP WITH SWING CONNECTOR

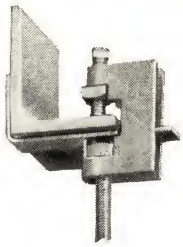
⅛" Steel—Weight Ea. 0.46 Lbs.—50 per Pkg.



Eliminates bending of hanger rod—when suspending from purlins—or when piping expands or contracts. Swivel bolt furnished with Patented Lock Nut. ⅜-inch hanger rod and nuts to be ordered separately.

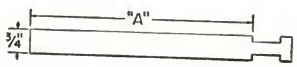
Price per 100—Electro-Galv. **$45.00**

KINDORF B-SERIES CONDUIT HANGERS



No. 1233 ANCHOR CLIP

⅛" Stteel—Packed 50 Per Pkg.

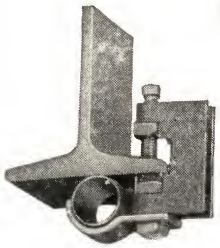


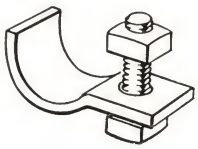
This Anchor Clip for use with No. 1231 Clamp on installations subject to excessive vibration.

Size A	Beam Flange Width	Wt. Lbs. per 100	Price per 100 Electro-Galv.
7"	Up to 6"	20	**$10.00**
11"	Up to 10"	32	**15.00**

No. 1234 CONDUIT STRAPS

3/16" x 1" Steel—Packed 50 Per Pkg.





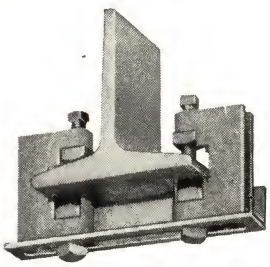
These straps are designed for use with No. 1231 Clamp. Installs conduit parallel with beam, across beam, or at any horizontal angle.

Straps furnished with ⅜-in. x 1-in. bolt and nut. No. 1231 Clamp to be ordered separately.

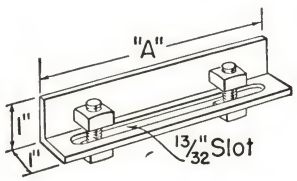
Size No.	Conduit or E.M.T. Size	Wt. Lbs. per 100	Price per 100 Electro-Galv.
1	½" Conduit	20	**$13.00**
2	¾" Conduit	21	**14.00**
3	1" Conduit	23	**16.00**
11	½" E.M.T.	20	**13.00**
12	¾" E.M.T.	21	**14.00**
13	1" E.M.T.	22	**15.00**

E.M.T.—threadless thin-wall conduit.

No. 1235 CENTER I-BEAM SUPPORT



⅛" Steel—Packed 50 Per Pkg.



This support with 13/32" slot is used with No. 1231 Clamps. Gives a low-cost connection to center of I-Beams.

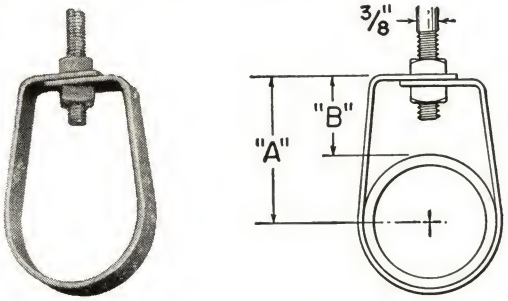
Unit furnished with TWO ⅜" x 1" bolts & nuts. No. 1231 Clamps to be ordered separately.

Size A	Beam Flange Width	Wt. Lbs. per 100	Price per 100 Electro-Galv.
7"	Up to 6"	40	**$20.00**
11"	Up to 10"	67	**30.00**

KINDORF B-SERIES CONDUIT HANGERS

No. 1240 CONDUIT HANGER

Load Rating (All Sizes) 500 Lbs.—50 Per Pkg.

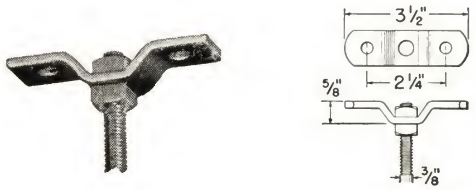


This conduit hanger provides easy vertical adjustment after conduit is in place. For ⅜-in. hanger rod only. ⅜-in. hanger rod and nuts to be ordered separately.

Conduit Size	A	B	Weight per 100	Price per 100 Electro-Galv.
½"	1 11/16"	1¼"	20.0 lbs.	**$14.00**
¾"	1¾"	1¼"	21.0 lbs.	**15.00**
1 "	1⅞"	1¼"	22.5 lbs.	**16.00**
1¼"	2⅛"	1¼"	25.0 lbs.	**17.00**
1½"	2¼"	1¼"	27.0 lbs.	**18.00**
2 "	2⅝"	1¼"	30.0 lbs.	**20.00**
2½"	3 3/16"	1¾"	35.0 lbs.	**22.00**
3 "	3½"	1¾"	40.0 lbs.	**24.00**
3½"	3¾"	1¾"	45.0 lbs.	**26.00**
4 "	5 "	1¾"	50.0 lbs.	**28.00**

No. 1243 CEILING FLANGE

3/16" x 1" Steel—Wt. Ea. 0.25 Lbs.—50 Per Pkg.



Center hole in flange is 7/16" diameter, for ⅜-in. hanger rod. The two end mounting holes are 11/32" diameter.

Hanger rod and nuts to be ordered separately.

Price per 100—Electro-Galv. **$15.00**

No. 1244 SIDE BEAM CONNECTOR



Used to secure a ⅜-in. hanger rod to side of beam.

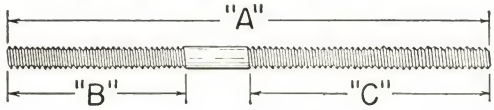
Holes in connector are 7/16-in. diameter.

Hanger rod and nuts to be ordered separately.

Price per 100—Electro-Galv. **$12.00**

KINDORF B-SERIES CONDUIT HANGERS

No. 1189 HANGER RODS—⅜-INCH DIA.



Rods have right-hand thread. Load Rating—800 lbs. Packed 50 per package. Electro-galvanized.

Length, In. "A"	"B"	"C"	Wt. Lbs. Each	Price Per 100	Length, In. "A"	"B"	"C"	Wt. Lbs. Each	Price Per 100
2	1	¾	.07	**$10.00**	18	4	10	.56	**$28.00**
4	2	1½	.13	**12.00**	24	4	10	.75	**34.00**
6	4	1½	.19	**14.00**	30	4	10	.94	**40.00**
8	4	3	.25	**16.00**	36	4	10	1.12	**46.00**
10	4	5	.32	**18.00**	42	4	10	1.31	**52.00**
12	4	6	.37	**20.50**	48	4	10	1.50	**58.00**
14	4	6	.44	**23.00**	....	..	....	.....	.....

No. 1116 AMERICAN STANDARD SQUARE NUTS

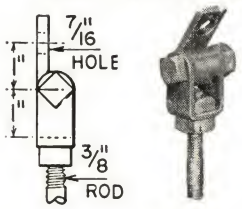
Price per 100—Electro-Galv.—⅜" Size..... **$2.25**

No. 1117 STEEL FLAT WASHERS

Price per 100—Electro-Galv.—⅜" Size..... **$1.20**

No. 1245 SWING CONNECTOR

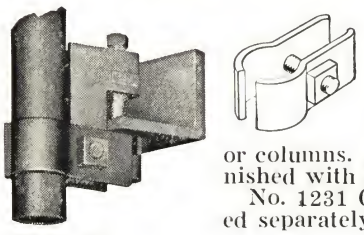
Steel—Weight Ea. 0.25 Lbs.—50 per Pair



Through bolt furnished with patented lock nut. Hanger rod and nuts to be ordered separately.

Price per 100—
Electro-Galv. **$35.00**

No. 1246 CONDUIT STRAPS (EDGE TYPE)



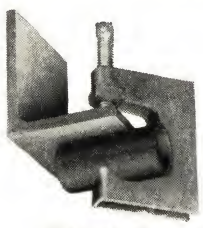
For use with No. 1231 Clamp. These straps install conduit across the edge of I-Beams, channels, angles or columns. Pair of straps furnished with bolt and nut.

No. 1231 Clamp to be ordered separately. Electro-Galv.

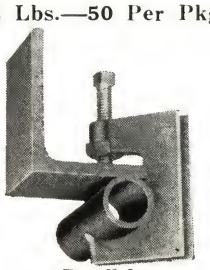
Conduit Size	Wt. Lbs. Per 100	Unit Pkg.	Price Per 100	Conduit Size	Wt. Lbs. Per 100	Unit Pkg.	Price Per 100
½	20.5	50	**$15.00**	2	52.5	50	**$36.00**
¾	21.5	50	**16.00**	2½	60.5	50	**41.00**
1	24.0	50	**19.00**	3	71.5	50	**49.00**
1¼	28.0	50	**22.00**	3½	79.0	50	**57.00**
1½	45.0	50	**30.00**	4	88.0	50	**66.00**

No. 1248 STEEL CONDUIT CLAMP

⅛" Steel—Weight Ea. 0.38 Lbs.—50 Per Pkg.



Right Angle



Parallel

This steel clamp will support ½", ¾" or 1" conduit parallel with or at right angle to beams, channels, angles or columns.

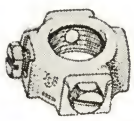
Clamps ½" conduit to beams up to 1" thick.
Clamps ¾" conduit to beams up to ¾" thick.
Clamps 1" conduit to beams up to ½" thick.

Price Per 100—Electro-Galv. **$28.00**

T & B GROUNDING FITTINGS

GROUNDING BUSHINGS

Approved by Underwriters' Laboratories



No. 3850-3855



No. 3860-3869

Size In.	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Cat. No.	Price Per 100	Cat. No.	Price Per 100
½	50	100	8	3850	$22.50	3860	$24.00
¾	50	100	9	3851	28.00	3861	30.50
1	25	50	12	3852	36.75	3862	40.75
1¼	25	50	15	3853	51.00	3863	56.00
1½	25	50	30	3854	88.00	3864	93.00
2	10	25	35	3855	141.00	3865	157.00
2½	5	10	40	.....	.....	3866	250.00
3	5	10	45	.....	.....	3867	315.00
3½	1	5	50	.....	.....	3868	.....
4	1	5	55	.....	.....	3869	.....

GROUND STRAPS

Wrap-around type of ground clamp, made of copper. Has four adjustment holes and knurled clamp for quick secure hold on ground wire.



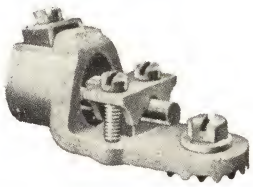
Cat. No.	Size Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
961	⅜ to 1	100	1000	9	$26.50
962	⅜ to 2	100	1000	13	35.25
963	⅜ to 3	100	1000	17	53.00

CONDUIT HUBS

Approved by Underwriters' Laboratories



No. 3930



No. 3960

Conduit Hubs

Cat. No.	Size Inches	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
3930	½-inch Conduit	5	25	24	$36.75
3940	¾-inch Conduit	5	20	30	126.00
3950	1 -inch Conduit	5	10	40	251.00
3970	½-inch Adj.	5	25	40	89.50
3960	Armored Wire ..	5	25	24	146.00

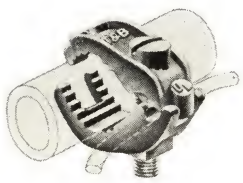
Waterpipe Clamps
(Complete Ground Fittings for Unarmored Wire)

2	½, ¾ or 1 ..	5	25	44		51.00
3	1¼, 1½ or 2 ..	5	10	80		88.00
4	2½, 3 or 3½ ..	2	4	140		425.00
5	4 , 4½ or 5 ..	2	4	200		640.00
6	6	..	1	300	.....	
3891	8	..	1	500	.....	
3892	9	..	1	340	.....	
3893	10	..	1	355	.....	
3894	12	..	1	365	.....	

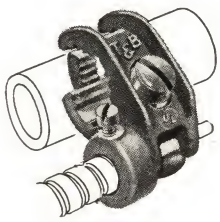
T & B GROUND FITTINGS

GENERAL PURPOSE GROUND CLAMP

Approved by Underwriters' Laboratories



No. 3846



No. 3847

For Unarmored Wire—No. 6, No. 4

Fits ½- to ¾-inch Copper Tubing; ½- to ¾-inch Water Pipe; ½- to 1-inch Ground Rod.

Cast from enduring bronze, it cannot corrode on copper tubing. No loose parts and only one screw to tighten. Easy to install in dark corners. Powerful jaws make a positive ground, yet they cannot crush copper tubing.

Cat. No.	Unit Quan.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
3846	5	50	17	$38.50

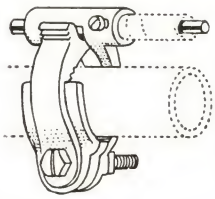
For Armored Wire—No. 8, No. 6, No. 4

Similar to No. 3846 above, but with a socket to hold armor and a set screw to secure it.

Cat. No.	Unit Quan.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
3847	5	50	21	$56.00

MALLEABLE IRON GROUND FITTINGS

Approved by Underwriters' Laboratories



Designed to take three sizes of ground wire, No. 8 and 6 bare armored and No. 4 bare unarmored to ½, ¾, and 1-inch waterpipe, as well as ground rods from ½-inch up. Made of tough malleable iron; Tabolite superior galvanizing.

For Nos. 8 and 6 Bare Armored Ground Wire and No. 4 Bare Unarmored Copper Wire to ½, ¾ and 1-inch Waterpipe with Set Screw to hold Armor of the No. 8 and No. 6 Wire

Cat. No.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
3841	5	25	38	$56.00

For Nos. 8 and 6 Bare Armored Ground Wire and No. 4 Bare Unarmored Copper Wire to Ground Rod from ½-Inch Up and ½, ¾ and 1-Inch Waterpipe. Same as No. 3841 with addition of Cast Jaw Filler

3843	5	25	48	56.00

Solderless Ground Fittings

For Nos. 8, 6 and 4 B&S Bare or Insulated Copper Wire to ½, ¾ and 1-Inch Waterpipe

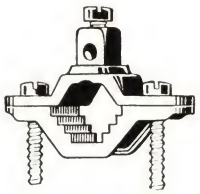
3840	5	25	38	44.00

For Nos. 8, 6 and 4 B&S Bare or Insulated Copper Wire to Ground Rod from ½-Inch Up and ½, ¾ and 1-Inch Waterpipe

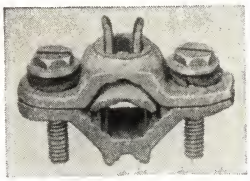
3842	5	25	48	44.00

M & W ELECTRICAL FITTINGS

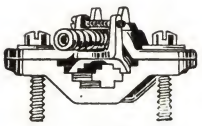
GROUND CLAMPS AND GROUND RODS



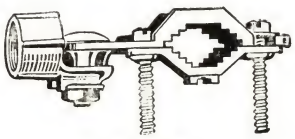
No. 20



No. 22



No. 30



No. 85–75

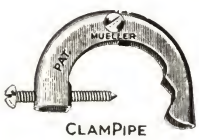


No. 1000

A complete line of reasonably priced ground clamps and rods that will fit every need and application.

Cat. No.	Size In.	Wt. Lbs. Per 100	Std. Pkg.	Price Per 100
20	½–1	25	100	**$24.00**
22	½–1	25	100	**24.00**
30	½–1	27	100	**26.00**
85–75	½–1	45	50	**42.00**
85	½–1	27	100	**27.00**
850	1¼–2	92	25	**52.00**
1000	8	800	10	**230.00**
1006	6	600	10	**200.00**

MUELLER GROUND CLAMP

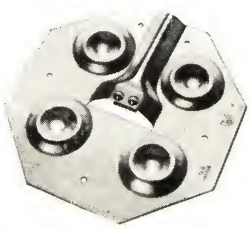


For use in grounding a radio set or other apparatus to a water or radiator pipe. The patented, channeled construction gives a five-point contact and a rigidity and effectiveness which cannot be found in any other make. When applied, will not spread, bend or lop over. It can easily be installed on a pipe lying close against a wall or other surface.

The point of the large case hardened screw cuts through paint or corrosion into clean metal, insuring a good contact. Cadmium plated. Applicable to pipe ⅜ to 1⅜ inches. Packed 10 in a box.

Price, No. **58** ClamPipe Ground Clamp, each **$0.15**

T & B POLE GROUND PLATE



For new pole line construction work and pole replacement projects. Stamped of high grade copper, it contains 4 built-in puddling cups which tend to retain the natural moisture accumulating at the butt of the pole. The constant vibration of the poles aids in the puddling action and a more positive ground is obtained.

Cat. No.	Std. Pkg.	Unit Qty.	Wt. Lbs. Per 100	Price Per 100
5575	50	10	50	**$105.00**

TRIANGLE ARMORED CABLE

HOT-DIP GALVANIZED ARMOR

Double Bushed and Bonded

Listed by Underwriters' Laboratories, Inc.

600 VOLTS



Size A.W.G.	Nominal O.D. Inches	Approx. Wt. Lbs. Per 1000 Ft.	Length per Coil, Feet	No. of Bushings in Bag Per Coil
		Single Conductor		
8 Solid	.465	268	250	35
6	.510	320	250	35
		Two Conductor		
14 Solid	.545	207	250	35
14	.545	207	100	16
14	.545	207	50	8
14	.545	207	25	4
14	.545	207	15	4
12	.580	236	250	35
12	.580	236	100	16
12	.580	236	50	8
12	.580	236	25	4
12	.580	236	15	4
10	.640	340	250	35
8	.780	607	150	20
8 Stranded	.815	607	150	20
6	.885	700	100	16
4	.990	850	100	16
2	1.220	1120	100	16

Also available in 3 and 4 conductors.

TRIANGLE BARE ARMORED GROUND WIRE

SOLID OR STRANDED

Triangle bare armored ground wire consists of a single, solid or stranded, uninsulated copper conductor covered with flexible interlocking armor.

Size A.W.G.	Approx. O.D. Inches	Approx. Wt. Lbs. 1000 Ft.	Length Per Coil Ft.
8 Solid	.225	136	250
6	.260	168	250
4	.378	241	250
6 Stranded	.260	168	250
4	.378	241	250

TRIANGLE FLEXIBLE STEEL CONDUIT

Hot Dipped Galvanized



Trade Sizes in Inches	Nominal Inside Diam., Inches	Approx. Ft. Per Std. Coil	Wt. Lbs. Per 1000 Feet
5/16	5/16	250	150
⅜	⅜	250	255
½	⅝	100	470
¾	13/16	50	575
1	1	50	1020
1¼	1¼	50	1250
1½	1½	25	1620
2	2	25	2125
2½	2½	25	2630
3	3	25	3130

SIZE CHART FOR T & B CONNECTORS

ARMORED CABLE



90° Angle Tite Bite

Cable Size	Straight Tite-Bite	90° Angle Tite-Bite	Straight Squeeze	45° Angle Squeeze	90° Angle Squeeze	Straight Two-Screw
2#14	300, 3101	321	253	265	266	3301, 240*
3#14	300	321	253	265	266	3301, 240*
4#14	300	321	253	265	266	3301, 240*
2#12	300	321	253	265	266	3301, 240*
3#12	300	321	253	265	266, 280	3301, 240*
4#12	300	321		265	266, 280	3301, 240*
2#10	300, 301	321			280	3301
3#10	301	322	260		272, 280	
4#10	302	323, 323V8				
1#8	300	321		265	266	3301
2#8	302, 303	323, 323V8, 324	254, 254V8	267	268	241*
3#8	302, 303	323V8, 324	254V8, 278		279	
1#6	300	321	253			3301, 240*
2#6	303, 304	324, 325, 326S	278		279	
3#6	304	325, 326S	255	269	270	
1#4	300	321				3301, 240*
2#4	304	325, 326S	255	269	270	
3#4	305		264	269	270	
2#2	305, 306	326	264			



Straight Tite-Bite



Straight Squeeze



45° Angle Squeeze

LEADED CABLE

Cable Size	Straight Tite-Bite	90° Angle Tite-Bite	Straight Squeeze	45° Angle Squeeze	90° Angle Squeeze	Straight Two-Screw
2#14L	300	321	253	265	266	3301, 240*
3#14L	300	321		265	266	3301, 240*
2#12L	300	321			280	3301
3#12L	301	322			280	
2#10L	301, 302	322, 323, 323V8	260		272	
3#10L		323, 323V8	260		272	241*
2#8L	303	324	254, 254V8	267	268, 279	
3#8L	303, 304	324, 325, 326S	255, 278		279	
2#6L	303, 304	324, 325, 326S	255			
3#6L	304	325	255	269	270	
2#4L	305					
3#4L	305, 306	326	264			



90° Angle Squeeze



Straight Two-Screw

FLEXIBLE STEEL CONDUIT

Cable Size	Straight Tite-Bite	90° Angle Tite-Bite	Straight Squeeze	45° Angle Squeeze	90° Angle Squeeze	Straight Two-Screw
⅜	300	321		265	266, 280	3301, 240*
½	302	323, 323V8	254, 254V8	267	268	241*
¾	304	325	255			
1	306	326	256		273	
1¼	308	327	257		274	
1½	310	328	258		275	
2	312	329	259		276	
2½	314	330	249			
3	316	331	277			



Straight Tite-Bite



Straight Two-Screw

NON-METALLIC SHEATHED CABLE

Cable Size	Straight Tite-Bite	Straight Two-Screw	Straight Slip-In.	Straight Squeeze
2#14	3100, 3101	3302	2020	2005
3#14	3100, 3101	3302, 3303	2020	2005
2#12	3100, 3101	3302	2020	2005
3#12		3302, 3303	2020	2005
2#10	3100, 3101	3302	2020	2006, 2007
3#10		3303	2020	2006, 2007
2#8		3303		2008
3#8		3304		2008
2#6		3304		2008, 2009
3#6				2009
2#4		3304		



Straight Slip-In



Straight Squeeze

SERVICE ENTRANCE CABLE

Cable Size	Straight Tite-Bite	Straight Two-Screw	Straight Slip-In	Cable Size	Straight Two-Screw
2#12	3100	3302	2020	2#6	3302, 3303
3#12	3100	3302	2020	3#6	3304
2#10	3100	3302	2020	2#4	3302, 3303
3#10		3303	2020	3#4	3304, 3305
2#8	3100	3302		2#2	3303, 3304
3#8		3303, 3304		3#2	3305

*Cat. Nos. 240, 241 are set screw connectors.

T & B ARMORED CABLE FITTINGS

Approved by Underwriters' Laboratories

"TITE-BITE" AND SQUEEZE CONNECTORS

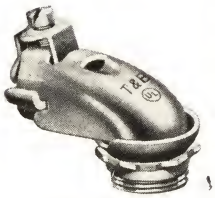


No. 300
Patented

"Tite-Bite" Sraight Connectors

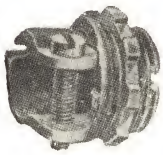
Cat. No.	Trade Size Inches	Size K.O. Inches	MADE TO HOLD Sizes of conductors listed, and others	Throat Bushed Diam. Inches	Std. Pkg.	Weight Per 100	List Price Per 100
300	⅜	½	14-2, 14-3, 14-4, 12-2, 12-3, 10-2, 4-1, 6-1; Lead 14-2, 14-3, 6-1; Flex. Cond. ⅜"; and others	½	1000	7	$10.90
301	⅜ A	½	12-4, 10-2, 10-3; Lead 12-3, 10-2, and others	19/32	100	16	22.75
302	½	½	10-4, 8-2; Lead 10-3; Flex. Cond. ½"; and others	19/32	100	16	22.75
303	¾ S	¾	8-2, 8-3, 6-2; Lead 8-2, 8-3; and others	49/64	100	22	26.00
304	¾	¾	6-2, 6-3, 4-2; Lead 6-2, 6-3; Flex. Cond. ¾"; and others	49/64	100	23	26.00
305	1S	1	6-2, 6-3, 4-2, 4-3; Lead 6-2, 6-3, 4-2; and others	⅞	25	36	42.50
306	1	1	2-2; Lead 4-3; Flex. Cond. 1"; and others	1	25	40	42.50
308	1¼	1¼	Flex. Cond. 1¼"	1¼	10	60	72.00
310	1½	1½	Flex. Cond. 1½"	1½	10	100	126.00
312	2	2	Flex. Cond. 2"	2	10	130	185.00
314	2½	2½	Flex. Cond. 2½"	2½	5	220	295.00
316	3	3	Flex. Cond. 3"	3	5	260	465.00

"Tite-Bite" Angle Connectors



No. 321
Patented

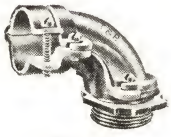
321	⅜-90°	½	14-2, 14-3, 14-4, 12-2, 12-3, 10-2, 4-1, 6-1; Lead 14-2, 14-3, 6-1; Flex. Cond. ⅜"; and others	½	100	19	$24.00
322	⅜ A-90°	½	10-2, 10-3; Lead 12-3, 10-2, and others	17/32	100	26	44.00
323	½-90°	½	10-4, 8-2; Lead 10-3; Flex. Cond. ½"; and others	19/32	100	27	44.00
323V8	½-90°	½	10-4, 8-2, 8-3; Lead 10-3; Flex. Cond. ½"; and others	21/32	100	25	44.00
324	¾ S-90°	¾	8-2, 8-3, 6-2; Lead 8-2, 8-3; and others	49/64	50	34	67.00
325	¾-90°	¾	6-2, 6-3, 4-2; Lead 6-2, 6-3; Flex Cond. ¾"; and others	49/64	50	34	67.00
326S	1S-90°	1	6-2, 6-3, 4-2, Lead 6-2, and others			60	101.00
326	1-90°	1	2-2; Lead 4-3; Flex. Cond. 1"; and others	1	25	60	101.00
327	1¼-90°	1¼	Flex. Cond. 1¼"	1¼	10	110	185.00
328	1½-90°	1½	Flex. Cond. 1½"	1½	10	170	320.00
329	2 -90°	2	Flex. Cond. 2"	2	5	280	465.00
330	2½-90°	2½	Flex. Cond. 2½"	2½	5	480	1280.00
331	3 -90°	3	Flex. Cond. 3"	3	5	800	1800.00



No. 253

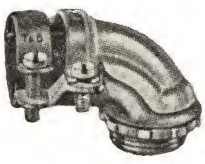
Squeeze Straight Connectors

253	⅜	½	14-2, 14-3, 12-2; Lead 14-2; and others	7/16	1000	6	$10.40
250	¼	⅜	Small armored wire or Flex. cord	5/16	100	6	36.00
252	5/16	⅜	Flex. cond. 5/16. Flex. cord and small armored wire	5/16	100	5	36.00
250A	¼	½	Small armored wire or Flex. cord	1⅜	100	6	40.00
252A	5/16	½	Flex. Cond. 5/16. Flex. cord and small armored wire	⅜	100	7	40.00
260	⅜ A	½	12-4, 10-2, 10-3; Lead 12-2, 12-3, 10-2; and others	9/16	100	13	21.50
254	½	½	12-4, 8-2; Lead 10-3; Flex. Cond. ½"; and others	19/32	100	13	21.50
278	¾ S	¾	8-2, 8-3, 6-2; Lead 8-2, 8-3; and others	¾	100	18	25.00
255	¾	¾	6-2, 6-3, 4-2; Lead 6-2, 6-3; Flex. Cond. ¾"; and others	¾	100	18	25.00
264	1S	1	2-2, 4-3; Lead 4-2, 4-3; and others	1	25	24	40.00
256	1	1	Flex. Cond. 1"	1	25	32	40.00
257	1¼	1¼	Flex. Cond. 1¼"	1 5/16	10	40	69.00
258	1½	1½	Flex. Cond. 1½"	1½	10	80	120.00
259	2	2	Flex. Cond. 2"	2	10	100	176.00
249	2½	2½	Flex. Cond. 2½"	2½	5	160	280.00
277	3	3	Flex. Cond. 3"	3	5	200	440.00



No. 280

Squeeze Angle Connectors



No. 266
Patented

265	⅜-45°	½	14-2, 14-3, 14-4, 12-2, 12-3, 12-4, 10-2, 8-1, 14L-2, 14L-3, Flex. Conduit ⅜	9/16	100	18	$22.00
266	⅜-90°	½	14-2, 14-3, 14-4, 12-2, 12-3, 12-4, 10-2, 8-1, 14L-2, 14L-3, Flex. Conduit ⅜	9/16	100	15	22.50
280	⅜ L-90°	½	12-3, 12-4, 10-2, 10-3, 12L-2, 12L-3, Flex Steel ⅜	9/16	100	34	22.50
272	⅜ A-90°	½	10-3, 10L-2, 10L-3	9/16	100	24	41.50
267	½-45°	½	8-2, 8L-2, Flex. Cond. ½	9/16	100	21	40.00
268	½-90°	½	8-2, 8L-2, Flex. Cond. ½	9/16	100	20	41.50
279	¾ S-90°	¾	8-3, 6-2, 8L-2, 8L-3	¾	50	32	63.00
269	¾-45°	¾	6-3, 4-2, 4-3, 6L-3	25/32	50	26	55.50
270	¾-90°	¾	6-3, 4-2, 4-3, 6L-3	25/32	50	26	63.00
273	1-90°	1	Flex. Cond. 1	1	25	52	96.00
274	1¼-90°	1¼	Flex. Cond. 1¼	1¼	10	110	176.00
275	1½-90°	1½	Flex. Cond. 1½	1½	10	180	305.00
276	2-90°	2	Flex. Cond. 2	2	5	300	440.00



No. 3301

Two-Screw Connector

3301	⅜	½	14-2, 14-3, 14-4, 12-2, 12-3, 10-2, 8-1 (Insul.), 6-1, 4-1; Lead 14-2, 14-3, 6-1; Flex. Cond. ⅜"; and others	7/16	1000	6	$22.00

T & B CONNECTORS

TWO-SCREW CONNECTORS

Approved by Underwriters' Laboratories



Precision made. All edges are rounded. No sharp burrs to harm conductors. The screws thread into the saddle, not the body. Made of steel, protected from corrosion with silvery Tabolite galvanizing.

No. 3302 fits non-metallic sheathed cables.
Non-Met. Cable—14-2, 14-3, 12-2, 12-3, 10-2.
Serv. Ent. Cable—12-2, 12-3, 10-2, 8-2, 6-2, 4-2.
or any non-metallic cable .310" to .650" dia.
No. 3303 fits non-metallic sheathed cables.
Non-Met. Cable—14-3, 12-3, 10-3, 8-2.
Serv. Ent. Cable—10-3, 8-3, 6-2, 6-3, 4-2, 2-2.
or any non-metallic cable .450" to .760" dia.
No. 3304 fits non-metallic sheathed cables.
Non-Met. Cable—6-2, 4-2.
Serv. Ent. Cable—8-3, 6-3, 4-3.
or any non-metallic cable .530" to 950" dia.

Cat. No.	Size Inches	Opening—Max.	Opening—Min.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
3302	⅜	.656	.250	100	1000	6	**$ 9.60**
3303	¾	.720	.450	25	100	17	**28.25**
3304	1	.950	.530	10	50	28	**38.75**
3305	1¼	1.250	.812	5	10	40	**59.00**

No. 2020 CONNECTOR

Approved by Underwriters' Laboratories



For non-metallic sheathed cable, 14W2, 14W3, 12W2, 12W3, 10W2, 10W3, also 3/32, ¼ and ⅜-inch flexible fibre tubing.

Cat. No.	Size In.	Size K.O.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
2020	⅜	½	100	1000	3½	**$7.60**

"TITE-BITE" CONNECTORS

Approved by Underwriters' Laboratories

With Corrugated Grip for Non-Metallic Sheathed Cable



No. 3101

Connectors for armored or non-metallic sheathed cables. Will grip any type or size of cable that will go into it—will take up to 1 No. 4 armored conduit. No. 3100 for non-metallic sheathed cables only.

Standard package, 1000.

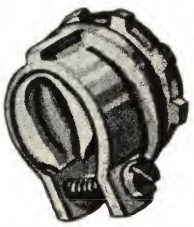
Cat. No.	Size Inches	Approx. Open Inches	Approx. Closed Inches	Unit Pkg.	Std. Pkg.	Price Per 100
3100	½	.495	.188	100	1000	**$10.90**
3101	⅜	.495	.188	100	1000	**12.30**

SQUEEZE TYPE CONNECTORS

For Non-Metallic Sheathed Cable

Approved by Underwriters' Laboratories

These connectors have a steel insert which protects oval cable against distortion or sharp bends. The insert is readily removed for round cables but cannot drop out accidentally. Malleable iron body with Tabolite plating.



Cat. No.	Size K.O.	Made to Hold—With Insert	Made to Hold—Insert Removed	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
2005	½	14W2 12W2	14W3 12W3	100	1000	8	**$28.75**
2006	½	10W2	10W3	50	100	13	**38.50**
2007	¾	10W2	10W3	25	50	15	**57.50**
2008	¾	8W2	8W3	25	50	15	**57.50**
2009	1	6W2	6W3	10	20	20	**77.00**

T & B CONNECTORS

INCLINED SET SCREW CONNECTORS

Approved by Underwriters' Laboratories



The screw is on the right hand side making it easy to tighten. Locknuts furnished without charge.

For 14W2, 14W3, 12W2, 12W3 ⅜-inch SS and DS Conduit

Cat. No.	Size Inches	K.O. Inches	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
240	⅜	½	100	1000	6	**$8.80**

For 8W2, 8W3, 10W2L, 8W2L, 10W3L ½-inch SS and DS Conduit

241	½	½	50	100	15	**19.20**

DUPLEX CONNECTOR

Approved by Underwriters' Laboratories

Designed to accommodate two armored cables in the same knockout saving labor, time and materials. The fitting has a single opening. Both cables are securely wedged in place by a single screw. Made of malleable iron, and plated with Tabolite Superior galvanizing.



Made to Hold—14W2, 14W3, 12W2

Cat. No.	Size In.	Size K.O.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
239	⅜	½	25	100	15	**$24.75**

T & B CONDUIT FITTINGS

"TITE-BITE" COMBINATION COUPLINGS

Approved by Underwriters' Laboratories

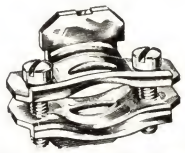


The "Tite-Bite" grip holds the flexible conduit securely and is vibration proof. The one-piece design cannot pull apart.

For Connecting Flexible Conduit and Standard Threaded Rigid Conduit

Cat. No.	Size Inches	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
440	½	10	50	26	**$ 49.50**
441	¾	10	50	30	**67.00**
442	1	5	25	52	**94.50**
443	1¼	5	25	72	**165.00**
444	1½	5	25	112	**240.00**
445	2	5	10	300	**341.00**
446	2½	5	10	320	**755.00**
447	3	2	5	400	**1040.00**

TOMIC CABLE CONNECTORS



No. 100 Romex Cable Connector
No. 200 Service Entrance and Range Cable Connector

Cat. No.	Size In. K.O.	Wt. Lbs. Per 1000	Price per 1000 Less than Carton	Carton 200	Standard Pkg. 1000
For Romex					
100	½	50	**$75.75**	**$57.00**	**$45.00**
For Service Entrance and Range					
200	¾	75	**$118.25**	**$91.00**	**$71.50**

"JAKE" CONDUIT FITTINGS

"JAKE" 90 DEGREE ADAPTERS

General Purpose Fitting



May be used for converting a straight box connector into a 90-degree box connector or may be used as a 90-degree box connector for rigid conduit.

Cat. No.	Size, Inches Conduit	Knockout	Carton	Std. Pkg.	Wt. Lbs. Per 100
N-050-R	½	½	25	100	28
N-075-R	¾	¾	20	60	44
N-100-R	1	1	10	30	84
N-125-R	1¼	1¼	5	10	88
N-150-R	1½	1½	5	10	132

"JAKE" 45-DEGREE ADAPTERS

General Purpose Fitting



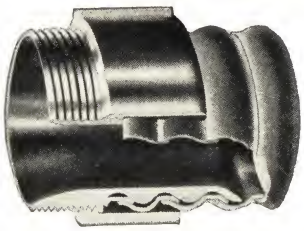
For converting a straight box connector into a 45-degree box connector, or may be used as a 45-degree box connector for rigid conduit.

Cat. No.	Size, Inches Conduit	Knockout	Carton	Std. Pkg.	Wt. Lbs. Per 100
F-050-R	½	½	15	45	44
F-075-R	¾	¾	10	30	77
F-100-R	1	1	5	20	121

"JAKE" CONDUIT FITTINGS

"JAKE" STRAIGHT BOX CONNECTORS

For Flexible Metallic Conduit



This box connector for flexible metallic conduit firmly grips and automatically locks the conduit in a uniform manner without tending to collapse the conduit. It covers up all ragged edges of the conduit and furnishes a smooth interior surface, thus preventing damage to conductors.

Cat. No.	Size, Inches Conduit	Knockout	Carton	Std. Pkg.	Wt. Lbs. Per 100
BC-031	⅛	½	25	100	10
BC-038	⅜	½	25	100	11
BC-050	½	½	25	100	10
BC-075	¾	¾	25	100	17
BC-100-2	*1	1	10	30	30
BC-100-3	*1	1	10	30	30
BC-125	1¼	1¼	5	10	60
BC-150	1½	1½	5	10	87
BC-200	2	2	5	10	147
BC-250	2½	2½	2	4	216
BC-300	3	3	2	4	330
BC-350	3½	3½	2	4	510
BC-400	4	4	2	4	730

"JAKE" 90 DEGREE CONNECTORS

For Flexible Metallic Conduit

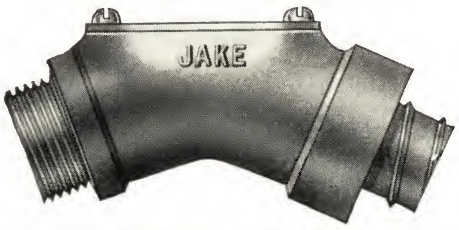


The 90-degree connector for flexible metallic conduit embodies all the good points of the straight box connector, and permits a direct pull in both directions on the 90° angle.

Cat. No.	Size, Inches Conduit	Knockout	Carton	Std. Pkg.	Wt. Lbs. Per 100
N-038	⅜	½	25	100	20
N-050	½	½	25	100	29
N-075	¾	¾	15	45	41
N-100-2	*1	1	10	30	84
N-100-3	*1	1	10	30	84
N-125	1¼	1¼	5	10	105
N-150	1½	1½	5	10	154
N-200	2	2	2	4	303

"JAKE" 45-DEGREE BOX CONNECTOR

For Flexible Metallic Conduit



Particularly adaptable in the making of connections on machine tools.

Cat. No.	Size, Inches Conduit	Knockout	Carton	Std. Pkg.	Wt. Lbs. Per 100
F-050	½	½	15	45	50
F-075	¾	¾	10	30	77
F-100-2	*1	1	5	20	138
F-100-3	*1	1	5	20	138

*1-inch flexible metallic conduit is made with both 2 and 3 threads or convolutions per linear inch. The suffix -2 designates 2 convolutions per linear inch, and suffix -3 designates 3 convolutions per linear inch.

BOXES, COVERS and STEEL GOODS

We represent the manufacturers of boxes, covers and steel goods listed below and described on the following pages.

THOMAS & BETTS COMPANY

THEPITT MANUFACTURING COMPANY

J. R. RICHARDS COMPANY

STEEL CITY ELECTRIC COMPANY

ALL STEEL EQUIPMENT, INC.

WAGNER MALLEABLE PRODUCTS COMPANY

KILLARK ELECTRIC MFG. COMPANY

KWIKON COMPANY

CORRELATIVE CATALOG NUMBERS COVERING LEADING LINES OF METALLIC OUTLET BOXES AND COVERS AND SWITCH BOXES

STEEL CITY	APPLETON	NATIONAL	RACO	GE and RATTAN	AUSTIN
SWITCH BOXES					
LO	33	3	BL	6973	L
LC	44	4	BLC	6974	LC
CL	111	8	RS	6975	CS
CD	222	13	RM	6971	CM
CW	333	14	RD	6982	C
CY	333-D		RDD	6981	CD
CB	778	4170	115	6978	SC
LX	173-F	12	MC	6972	BXF
LXM	171-F	7	MA	6976	BXSF
LCN	387	5	BLN	6974-D	LR
LXW	386		MCL	6972-D	BN
800	33-B	3-SB	BLB	7073	LB
802	44-B	4-SB	BLCB	7074	LCB
803	333-B	14-SB	RDB	7082	CB
804	222-B	13-SB	RMB	7071	CMB
805	111-B	8-SB	RSB	7075	CSB
806	173-FB	12-SB	MCB	7072	BXFB
806-W	386-B		MCBL	7072-D	BNB
807-W	385-B		MABL	7076-D	BNSB
807-SW	385-NL			7676-D	
LOV	33-VB		BLO		LA
LCV	44-VB	4-SS	BLCO		LCA
LCNV	387-VB		BLNO		LRA
LXMWV	385-VB				BNSA
LXV	173-FVB	12-SS	MC-O		BXFA
LXMV	171-FVB	7-SS	MA-O		BXSFA
CDV	222-VB		RMO		CMA
CWV	333-VB		RDO		CA
LXXL	173-FEE	12-XL	MCXL	7372	BXF-4
LXX-1	173-FES	12-XR	MCR	7472	BXF-6
LXX-2	173-FESW	12-XW	MCW	7572	BXF-5
LXMD	385		MA-3	6976-D	CNX
LXWV	386-VB		MCLO		BNA
807	171-FB	7-SB	MAB	7076	BXSFB
LXX	173-FEX	12-X	MCX	7272	BXF-3
UTILITY BOXES AND COVERS					
58351	4-SSLS	2018	408		500-SS
58361	4-CS	2020	404	5800	500-S
58371	4-SSL	2022	400		500
59361	4-SSLE				500-X
58361-BL		2020-SB		5800-BL	
58-C-1	2540	20-A	410	58-R-1	540-C
58-C-3	2537	20-B	421		537-C
58-C-5	2539	20-F	423	58-R-5	539-C
58-C-7	2510	20-C	425	58-R-7	510-C
58-C-30	2594	20-E	427	58-R-14	598-C
58-C-40	2599	20-K		58-R-40	552-C

CORRELATIVE CATALOG NUMBERS COVERING LEADING LINES OF METALLIC OUTLET BOXES AND COVERS AND SWITCH BOXES

STEEL CITY	APPLETON	NATIONAL	RACO	GE and RATTAN	AUSTIN
OUTLET BOXES AND COVERS—3″ and 4″ Octagon					
24151	3-O	2900	AO-½	24151	7-O
24155	513-L	2908	AOL	24155	717
24155-C	513-LC		AOLC	24155-C	717-C
24151-W	568-L		DO-21-N	24151-CD	7-BN
24151-U	534-L	2970			89
24151-X	550-L	2968	DO-22-N	24151-C	89-X
24151-RD	565-L	2354		24151-CR	
24151-XSB	BHS-550-L	3813-FS	SU-22	24151-CBH	HS-89-X
24151-WSB	BHS-568-L		SU-21	24151-CBHD	HS-7-BN
24151-USB	BHS-534-L	3817-FS			HS-89
24-C-1	8301-A	28-AC	AO-5	24-C-1	7704
24-C-2	8301	28-A	AO-1	24-C-2	7701
24-C-6	8320	28-AQ	AO-7	24-C-6	7705
24-C-7	8321	28-AR	AO-8	24-C-7	7702
24-C-12	8302-A	28-L	AO-2	24-C-12	7703-A
24-C-28	8317	28-S	AO-6	24-C-28	7708
24-C-35		28-HG	AO-10	24-C-35	
24-C-36	8311	28-HH		24-C-36	7711
54151	4-O	2700	BO	54151	9-O
54151-½ & ¾	4-O-Sp.	2702	BOC	54151-Spl.	9-O-Sp.
54171	4-OD	2714	BOD	54171	9-OD
54171-½ & ¾	4-OD-Sp.		BODC	54171-Spl.	9-OD-Sp.
54151-W	569-L		DO-16-N	54151-CD	9-BN
54151-USB		3837-FS			
54151-X	551-L	2768	DO-15-N	54151-C	95-X
54151-U	566-L	2770			
54151-XSB	BHS-551-L	3839-FS	SU-15	54151-CBH	HS-95-X
54151-WSB	BHS-569-L		SU-16	54151-CBHD	HS-9-BN
54-C-1	8403	26-AC	BO-5	54-C-1	7904
54-C-2	8401	26-A	BO-1	54-C-2	7901
54-C-3	8409	26-Q	BO-11	54-C-3	7910
54-C-6	8413	26-AQ	BO-7	54-C-6	7905
54-C-7	8414	26-AR	BO-8	54-C-7	7902
54-C-12	8402-A	26-L	BO-2	54-C-12	7903-A
54-C-14	8434	26-H	BO-13	54-C-14	
54-C-28	8404	26-S	BO-6	54-C-28	7907
54-C-35		26-HG	BO-10	54-C-35	
54-C-36	8424	26-HH		54-C-36	7915

CORRELATIVE CATALOG NUMBERS COVERING LEADING LINES OF METALLIC OUTLET BOXES AND COVERS AND SWITCH BOXES

STEEL CITY	APPLETON	NATIONAL	RACO	GE and RATTAN	AUSTIN
OUTLET BOXES AND COVERS—4" Square					
52151	4-S	2400	CO	52151	300
52151-½ & ¾	4-S Sp.	2410	COC	52151-Spl.	300-Spl.
52141	4-SL	2407		52141	300-G
52171	4-SD		COD	52171	300-D
52151-B	4-SB		COB	52151-B	
52-C-1	8465	24-AC	CL-5	52-C-1	7305
52-C-2	8462	24-A	CO-1	52-C-2	7301
52-C-3	8461	24-Q	CO-11	52-C-3	7308
52-C-6	8474	24-AQ	CO-7	52-C-6	7305-A
52-C-7	8474-A	24-AR	CO-8	52-C-7	7302
52-C-10		24-HZO		52-C-10	
52-C-12	8463-A	24-L	CO-2	52-C-12	7303-A
52-C-13	8468-A	24-HY	CO-14	52-C-13	7313
52-C-14	8468	24-H	CO-13	52-C-14	7314
52-C-15	8466-A	24-HK	CO-12-A	52-C-15	7315
52-C-16	8466	24-HL	CO-12	52-C-16	7316
52-C-17	8470-A	24-KY	CO-18	52-C-17	7317-S
52-C-18	8470	24-K	CO-17	52-C-18	7317
52-C-19	8469-A	24-KK	CO-16-A	52-C-19	7317-B
52-C-20	8470-B	24-KZ	CO-19	52-C-20	7317-F
52-C-21	8469	24-KL	CO-16	52-C-21	7318
52-C-28	8478	24-S	CO-6	52-C-28	7307-S
52-C-35		24-HG	CO-10	52-C-35	
52-C-36	8472	24-HH		52-C-36	7305-B
52-C-48	8460	24-C	CO-4	52-C-48	7307
52-C-57	8459-B		CO-3	52-C-57	7322
52-C-62	8468-B	24-HZ	CO-15	52-C-62	7313-S
5220-SS	8510				7363
5217-SS	8511				7364
5218-SS	8512				7365
5220-S	8505				7360
5217-S	8506				7361
5218-S	8507				7362
RS-1	8372		CO-28	52-R-1	7382
RS-2	8374		CO-30	52-R-2	7384
RS-5	8366		CO-25	52-R-5	7376
RS-8	8370		CO-31	52-R-8	7380
RS-9	8360		CO-21	52-R-9	7370
RS-11	8362		CO-22	52-R-11	7372
RS-12	8364		CO-23	52-R-12	7374
X-1½	4-SES	2420			

CORRELATIVE CATALOG NUMBERS COVERING LEADING LINES OF METALLIC OUTLET BOXES AND COVERS AND SWITCH BOXES

STEEL CITY	APPLETON	NATIONAL	RACO	GE and RATTAN	AUSTIN
OUTLET BOXES AND COVERS—4-11/16" Square					
72151	4-SJ	2500	FO	72151	2
72171	4-SJD	2514	FOD	72171	2-D
72-C-1	8487	25-AC	FO-5	72-C-1	7203
72-C-2	8480	25-A	FO-1	72-C-2	7201
72-C-3	8488	25-Q	FO-11	72-C-3	7204
72-C-6		25-AQ	FO-7		
72-C-7	8489	25-AR	FO-8	72-C-7	7202
72-C-12	8482-A	25-L	FO-2	72-C-12	7202-A
72-C-14	8485	25-H	FO-13	72-C-14	7206
72-C-15		25-HK		72-C-15	
72-C-17				72-C-17	
72-C-18	8486	25-K	FO-17	72-C-18	7207
72-C-48	8481	25-C	FO-4	72-C-48	7205
GANG BOXES AND COVERS					
2-G	GB-2	3002	502	6732	32-GB
3-G	GB-3	3003	503	6733	33-GB
4-G	GB-4	3004	504	6734	34-GB
5-G	GB-5	3005	505	6735	35-GB
6-G	GB-6	3006	506	6736	36-GB
7-G	GB-7	3007	507	6737	37-GB
8-G	GB-8	3008	508	6738	38-GB
9-G	GB-9	3009	509	6739	39-GB
2-GC	GSC-2	30-C-2	552	6751	32-GSC
3-GC	GSC-3	30-C-3	553	6753	33-GSC
4-GC	GSC-4	30-C-4	554	6755	34-GSC
5-GC	GSC-5	30-C-5	555	6757	35-GSC
6-GC	GSC-6	30-C-6	556	6759	36-GSC
7-GC	GSC-7	30-C-7	557	6761	37-GSC
8-GC	GSC-8	30-C-8	558	6763	38-GSC
9-GC	GSC-9	30-C-9	559	6765	39-GSC
10-GC	GSC-10	30-C-10	560	6767	310-GSC
CONCRETE BOXES AND COVERS					
54531	OCR-2	3202	820	54531	OC-2
54541	OCR-2½	3202½	825	54541	OC-2½
54551	OCR-3	3302	830	54551	OC-3
54561	OCR-3½	3402	835	54561	OC-3½
54571	OCR-4	3502	840	54571	OC-4
54581	OCR-5	3602	850	54581	OC-5
54591	OCR-6	3702	860	54591	OC-6
CPB	OCP		895	54712	OCP
CPB-3/8	OCP-3/8	3101	896	54717	OCP-3/8
CPB-½	OCP-½		897	54719	OCP-½

CORRELATIVE CATALOG NUMBERS COVERING LEADING LINES OF METALLIC OUTLET BOXES AND COVERS AND SWITCH BOXES

STEEL CITY	APPLETON	NATIONAL	RACO	GE and RATTAN	AUSTIN
BAR HANGERS					
6000	S-21	2263	HB	6600	1900
6001	S-23	2265	HS	6602	1905
6002	S-24	2266	HD	6603	1915
6003	BHOW-3/8	2267	HO	6604	920
6005	CBH	2268	HC	6605	910
6000-A (24″)	S-22	2263-L	HB-24″	6601	1900-A
6001-A (24″)	S-25	2265-L	HS-24″	6602-L	1905-A
6002-A (24″)	S-26	2266-L	HD-24″		1915-A
CEILING BOXES					
36115	510-L	2835	DO-18	36115	714
36115-C	510-LC	2835-L-2	DO-19	36115-C	714-C
36125-C	511-LC		DO-9		
56111	4-CL	2630	EO-2	56111	44-E
56112	4-C		EO-1	56112	44
56113	4-PLS		EO-4	56113	9-PLS
56114	4-PL		EO-5	56114	9-PL
56121	4-CDL		EO-9	56121	4-E
56122	4-CD		EO-8	56122	4
56712	4-P		EO-3	56712	9-P
36151-X		2969	DO-13-N		88-X
36151-XS	530-L	2966	DO-13		88-XS
36125-X	552-L	2368	DO-12-N	26625	87-X
36125-XS	552-LFS	2365	DO-12	26625-F	87-XS
BOXES WITH OUTSIDE CLAMPS					
24151-O	570-L		DO-25-NJK		84-X
24151-OS	570-LFS		DO-25-JK		84-XS
54151-O	571-L		DO-26-NJK		96-X
54151-OS	571-LFS		DO-26-JK		96-XS
24151-OSB	BHS-570-L		SU-25-JK		HS-84-X
54151-OSB-1	BHS-571-L		SU-226-JK		HS-96-X
54151-OSB-2	BHD-571-L		SU-26-JK		HD-96-X
EXTENSION RINGS For 3-1/4″ and 4″ Octagon, 4″ and 4-11/16″ Square and Utility Boxes					
25151 ext. ring	3-OE	2904	AOX	25151	77-K
55151-Ext	4-OE	2704	BOX	55151	79-K
55171-Ext	4-OED	2716	BOXD	55171	79-M
53151	4-SE	2404	COX	53151	79-S
53171				53171	
73151	4-SJE	2504	FOX	73151	2-X
73171	4-SJDE	2516	FOXD	73171	2-XD

STEEL CITY OUTLET BOXES AND COVERS

Galvanized

3¼-INCH OCTAGON BOXES



3¼-inch octagon box, 1½ inches deep inside. ½-inch and ¾-inch knockouts; four in sides and one in bottom. Holes in bottom for fixture studs and nails.

Cat. No.	Knockouts—Bottom	Knockouts—Sides	Std. Pkg.	Approx. Wt. Lbs. Per 100
24151-½	1–½"	4–½"	100	48
24151-¾	1–½"	4–¾"	100	48
24151-½ & ¾	1–½"	2–½", 2–¾"	100	48

COVERS FOR 3¼ AND 3½-INCH ROUND AND OCTAGON BOXES



Flat blank cover.

Cat. No.	Diam. Inches	Std. Pkg.	Approx. Wt. Lbs. Per 100
24-C-1	3½	100	20



Raised closed cover; raised ⅝-inch.

Cat. No.	Diam. Inches	Std. Pkg.	Approx. Wt. Lbs. Per 100
24-C-2	3½	100	22



Flat cover, with ½-inch knockout in center.

Cat. No.	Diam. Inches	Std. Pkg.	Approx. Wt. Lbs. Per 100
24-C-6	3½	100	20



Raised cover, with ½-inch knockout; raised ⅝-inch.

Cat. No.	Diam. Inches	Std. Pkg.	Approx. Wt. Lbs. Per 100
24-C-7	3½	100	22



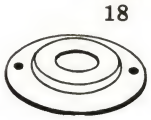
Raised drop cord cover with ⅜-inch bushed hole; raised ⅝-inch.

Cat. No.	Diam. Inches	Std. Pkg.	Approx. Wt. Lbs. Per 100
24-C-12	3½	100	22



Flat snap switch or wall receptacle cover with bolts and nuts. Slots give range of centers from ⅞ to 1⅞ inches.

Cat. No.	Diam. Inches	Std. Pkg.	Approx. Wt. Lbs. Per 100
24-C-28	3½	100	18



Raised cover with 1$\frac{15}{32}$-inch center hole for receptacles; raised ⅝-inch.

Cat. No.	Diam. Inches	Std. Pkg.	Approx. Wt. Lbs. Per 100
24-C-35	3½	100	19

STEEL CITY OUTLET BOXES AND COVERS

Galvanized

4-INCH OCTAGON BOXES



4-inch octagon box. No. 54151, 1½ inches deep inside; No. 54171, 2⅛ inches deep inside. ½-inch and ¾-inch knockouts; four in sides and five in bottom.

Holes in bottom for fixture studs and nails.

Cat. No.	Knockouts—Bottom	Knockouts—Sides	Approx. Wt. Lbs. Per 100
4-Inch Octagon Boxes—1½ Inches Deep			
54151-½	5–½"	4–½"	62
54151-¾	3–½", 2–¾"	4–¾"	62
54151-½ & ¾	3–½", 2–¾"	2–½", 2–¾"	62
4-Inch Octagon Boxes—2⅛ Inches Deep			
54171-½	5–½"	4–½"	82
54171-¾	3–½", 2–¾"	4–¾"	82
54171-½ & ¾	3–½", 2–¾"	2–½", 2–¾"	82
54171-1"	3–½", 2¾"	4-1"	82

Standard package, 50.

COVERS FOR 4-INCH OCTAGON BOXES



Flat blank cover.

Cat. No.	Diam. Inches	Std. Pkg.	Approx. Wt. Lbs. Per 100
54-C-1	4¼	100	28



Raised closed cover; raised ⅝-inch.

54-C-2	4¼	100	37

Raised open, with ears; drilled 2$\frac{33}{32}$-inch on centers to take 3¼-inch cover, receptacle or steel cover; 54-C-3 raised ⅝-inch.



54-C-3	4¼	100	25



Flat cover, with ½-inch knockout in center.

54-C-6	4¼	100	28

Raised cover, with ½-inch knockout in center; raised ⅝-inch.



54-C-7	4¼	100	37



Raised drop cord cover, with ⅜-inch bushed hole; raised ⅝-inch.

54-C-12	4¼	100	36

Raised cover for single switch or receptacle; raised ⅝-inch.



54-C-14	4¼	100	30



Flat snap switch or wall receptacle cover with bolts and nuts.

54-C-28	4¼	100	26

STEEL CITY OUTLET BOXES AND COVERS

Galvanized

COVERS FOR 4-INCH OCTAGON BOXES



Raised cover with $1\frac{15}{32}$-inch center hole for receptacles; raised $\frac{5}{8}$-inch.

Cat. No.	Diam. Inches	Std. Pkg.	Approx. Wt. Lbs. Per 100
54-C-35	4¼	100	25



Raised open canopy cover; opening 2¾ inches diameter.

54-C-48	4¼	100	24

STEEL CITY CEILING BOXES AND PLATES

Galvanized or Black Enamel



No. 36115-C

No. 36115 round box, ½-inch deep; three ½-inch knockouts and four for loom; with lugs.

No. 36115-C, same with two clamps.

Cat. No.	Diam. Inches	Depth Inches	Std. Pkg.	Approx. Wt. Lbs. Per 100
36115	3¼	½	100	31
36115-C	3¼	½	100	34



No. 36125-C

No. 36125 round box, ¾-inch deep; three ½-inch knockouts and four for loom; with lugs.

No. 36125-C, same with two clamps.

36125	3¼	¾	100	43
36125-C	3¼	¾	100	46

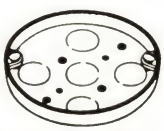


No. 36716-C

No. 36716 round plate; three ½-inch knockouts and four for loom; no clamps.

No. 36716-C, same with two loom clamps.

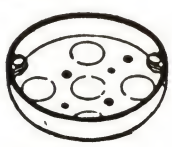
36716	3½	....	100	23
36716-C	3½	....	100	25



4-inch round ceiling box, ½-inch deep; five ½-inch or five ¾-inch knockouts and four for loom; with lugs.

Boxes have holes in bottom for fixture studs and nails.

56111	4	½	100	40



4-inch round ceiling box, ¾-inch deep; five ½-inch knockouts; with lugs but no clamps.

Boxes have holes in bottom for fixture studs and nails.

56121	4	¾	100	38



4-inch round flat ceiling plate; five ½-inch knockouts.

Plates have holes for fixture studs and nails.

56712	4	....	100	22

STEEL CITY COMBINATION BOXES AND ASSEMBLIES

Galvanized

FOR FLEXIBLE METALLIC CABLE

Outlet Boxes with C-12 and C-A1 or C-10 Clamps will take Type R Armored Cable

Octagon Boxes With Lugs



24151-XS



54151-A

$\frac{21}{32}$ inch pri-outs: two in two sides, four in bottom; knockouts for ½-inch conduit: two in two sides, one in bottom.

Cat. No.	Description	Diam. Inches	Deep	Std. Pkg.	Wt. Lbs. Per 100
	C-12 Clamps				
24151-X	.....	3½	1½	50	65
24151-XS	⅜-inch stud	3½	1½	50	68
	C-A1 Clamps				
54151-A	.....	4	1½	50	66
54151-AS	⅜-inch stud	4	1½	50	69

Round Boxes with Lugs



36125-XS

No. 36125 — $\frac{21}{32}$-inch pri-outs and knockout for ½-inch conduit. Bushing plates. C-10 clamps. Galvanized only.

Cat. No.	Description	Diam. Inches	Deep	Std. Pkg.	Wt. Lbs. Per 100
36125-X	.....	3¼	¾	50	46
36125-XS	⅜-inch stud	3¼	¾	50	49

Octagon Boxes with Outside Mounting Ears

All octagon and square boxes can be equipped with mounting ears. Two $\frac{21}{32}$-inch pri-outs two sides, four in bottom. Two KO's for ½-inch conduit two sides, one in bottom.



24151-XE

Cat. No.	Description	Diam. Inches	Deep	Std. Pkg.	Wt. Lbs. Per 100
	C-12 Clamps				
24151-XE	.....	3½	1½	50	70
24151-XSE	⅜-inch stud	3½	1½	50	73
	C-A1 Clamps				
54151-AE	.....	4	1½	50	75
54151-ASE	⅜-inch stud	4	1½	50	79

FOR NON-METALLIC SHEATHED CABLE

Outlet Boxes with C-5 or C-NI Clamps will take Type T Nonmetallic Sheathed Cable in Sizes 14-2, 12-2, 14-3, and 12-3

Octagon Boxes with Lugs



24151-W

$\frac{21}{32}$-inch pri-outs: two in sides, four in bottom; knockouts for ½-inch conduit: two in sides, one in bottom.

Cat. No.	Description	Diam. In.	Deep	Wt. Lbs. Per 100
24151-W	C-5 clamps	3½	1½	57
24151-WS	C-5 clamps, ⅜" stud	3½	1½	60
54151-N	C-NI clamps	4	1½	66
54151-NS	C-NI clamps, ⅜" stud	4	1½	69

Standard Package—50.

STEEL CITY COMBINATION BOXES AND ASSEMBLIES

Galvanized

FOR NON-METALLIC SHEATHED CABLE

Outlet Boxes with C-11 Clamps will take Type T Non-metallic Sheathed Cable, Sizes 14-2, 12-2, and 14-3, 12-3

Octagon Boxes with Lugs



36125-DS

No. **36125-D** has four $\frac{21}{32}$-inch prioults and knockout for ½-inch conduit. Galvanized only.

Cat. No.	Description	Diam. In.	Deep	Std. Pkg.	Wt. Lbs. Per 100
36125-D	.....	3¼	¾	50	45
36125-DS	⅜-inch stud	3¼	¾	50	48

STEEL CITY COMBINATION BOXES AND BAR-SETS

Galvanized

FOR FLEXIBLE METALLIC CONDUIT

Outlet Boxes with C-12 and C-AI Clamps will take Type R Armored Cable



24151-XSB

$\frac{21}{32}$-inch pri-outs: two in two sides, four in bottom. KO's for ½-inch conduit: two in two sides, one in bottom.

Cat. No.	Clamps	Studs	Diam. In.	Deep	Std. Pkg.	Wt. Lbs. Per 100
24151-XSB	C-12	⅜	3½	1½	25	123
54151-ASB	C-AI	⅜	4	1½	25	128

FOR RIGID METALLIC CONDUIT

Knockouts for ½-inch conduit: four in sides.

Cat. No.	Clamps	Studs	Diam. In.	Deep	Std. Pkg.	Wt. Lbs. Per 100
24151-SB	.....	⅜	3½	1½	25	110
54151-SB	.....	⅜	4	1½	25	120

FOR NON-METALLIC SHEATHED CABLE

Boxes with C-5 or C-NI Clamps will take Type T Non-metallic Sheathed Cable, Sizes 14-2, 12-2, and 14-3, 12-3

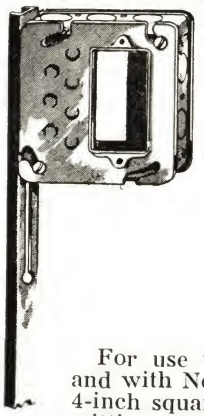


54151-NSB

$\frac{21}{32}$-inch pri-outs: two in two sides, four in bottom. KO for ½-inch conduit: two in two sides, one in bottom.

24151-WSB	C-5	⅜	3½	1½	25	123
54151-NSB	C-NI	⅜	4	1½	25	128

STEEL CITY BOX SUPPORTS





7502

For use with convenience wall boxes and with No. 52141½ and No. 52141-R-½ 4-inch square boxes. Riser is slotted permitting mounting of box at desired height.

Sturdy channeled steel construction. Keyhole at bottom of slot permits mounting box without removing screws. Slot is 8 inches long, extending to ½-inch from top of riser.

Cat. No.	Length Inches	Width Inches	Std. Pkg.	Wt. Lbs. Per 100
7502	20	$\frac{13}{16}$	50	62
7503	31	$\frac{13}{16}$	50	82

STEEL CITY BAR HANGERS

WITH WINGNUT STUD

Straight Type



6000

Cat. No.	Description	Lgth. of Bar	Lgth. of Offset	Dpth. of Offset	Std. Pkg.	Wt. Lbs. Per 100
6000	Wingnut	18	.....	.....	100	50
6000A	Wingnut	24	.....	.....	50	65

Shallow Offset



6001	Wingnut	18	9	1½	50	58
6001A	Wingnut	24	9	1½	50	73

Deep Offset



6002	Wingnut	18	9	2	50	60
6002A	Wingnut	24	9	2	50	75

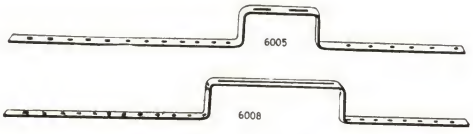
Straight—Old Work



6003

6003	Old work	12	.....	.....	100	38

Offset Cleat



6005

6008

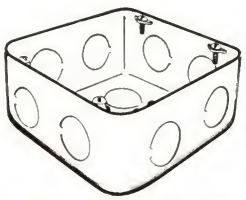
6005	Offset cleat....	21	4	1½	50	65
6006	Offset cleat....	21	6½	¾	50	75
6007	Offset cleat....	18½	9	1¾	50	75
6008*	Offset cleat....	21	7	1⅞	50	59

*With continuous slot for adjustment.

STEEL CITY OUTLET BOXES AND COVERS

Galvanized Only

4 11/16-INCH SQUARE BOXES



No. 72151 square box, 1½ inches deep; knockouts, eight in sides and five in bottom for ½-inch conduit; or eight in sides for ¾-inch conduit and three ½-inch and two ¾-inch in bottom.

No. 72171 2⅛ inches deep; same as No. 72151 but can also be furnished with eight knockouts in sides for 1¼-inch instead of ¾-inch, if so specified.

Holes for fixture stud and nails in bottom.

Cat. No.	Knockouts—Sides	Knockouts—Bottom	Deep In.	Wt. Lbs. Per 100
72151-½	10–½	5–½	1½	108
72151-¾	8–¾	3–½, 2–¾	1½	108
72151-½ & ¾	8–½, 4–¾	3–½, 2–¾	1½	108
72171-½	10–½	5–½	2⅛	124
72171-¾	8–¾	2–¾, 3–½	2⅛	124
72171-½ & ¾	8–½, 4–¾	3–½, 2–¾	2⅛	124
72171-1	8–1	3–½, 2–¾	2⅛	124
72171-1¼	6–1¼	3–½, 2–¾	2⅛	124

Standard package, 25.

COVERS FOR 4 11/16-INCH SQUARE BOXES

Flat blank cover.



Cat. No.	Size Inches	Std. Pkg.	Approx. Wt. Lbs. Per 100
72-C-1	4 11/16	25	52



Raised closed cover; raised ⅝-inch.

72-C-2 4 11/16 25 56

Raised open cover with ears drilled 2 3/32 inches on centers to take 3¼-inch box cover receptacles or covers; raised ⅝-inch.



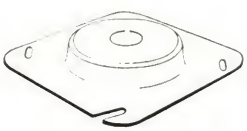
72-C-3 4 11/16 25 47



Square cover flat with ½-inch knockout in center.

72-C-6 4 11/16 25 52

Raised cover with ½-inch knockout, raised ⅝-inch.



72-C-7 4 11/16 25 56

STEEL CITY OUTLET BOXES AND COVERS

Galvanized Only

COVERS FOR 4 11/16-INCH SQUARE BOXES



Raised drop cord cover with ⅜-inch metal bushing; raised ⅝-inch.

Cat. No.	Size Inches	Std. Pkg.	Approx. Wt. Lbs. Per 100
72-C-12	4 11/16	25	56

Raised cover for single rectangular base switch or receptacle; raised ¾-inch.



72-C-14 4 11/16 25 47

Raised cover for single rectangular base switch or receptacle; raised 1-inch.

72-C-15 4 11/16 25 54

For two rectangular base switches or receptacles; raised ½-inch.

72-C-17 4 11/16 25 40

Raised cover for two rectangular base switches or receptacles; raised ¾-inch.

72-C-18 4 11/16 25 45



Raised cover with 2¾-inch opening; raised ⅝-inch.

72-C-48 4 11/16 25 46

4-INCH SQUARE BOXES

Galvanized or Black Enamel

All 4-inch square boxes are now furnished with double lugs for reversing covers. For boxes installed with single lugs, double lugs and additional screws can be furnished, free of charge, to eliminate the necessity of drilling extra holes in covers or changing boxes around.



52151



52141



52171

1½ Inches Deep

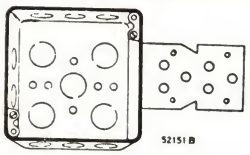
Cat. No.	Knockouts—Sides	Knockouts—Bottom	Std. Pkg.	Wt. Lbs. Per 100
52151-½	10–½"	5–½"	50	84
52151-¾	8–¾"	3–½", 2–¾"	50	84
52151-½ & ¾	8–½", 4–¾"	3–½", 2–¾"	50	84
1¼ Inches Deep				
52141*-½	10–½"	5–½"	50	80
2⅛ Inches Deep				
52171-½	10–½"	5–½"	50	94
52171-¾	8–¾"	2–¾", 3–½"	50	94
52171-½ & ¾	4–¾", 8–½"	2–¾", 3–½"	50	94
52171-1	8–1"	2–¾", 3–½"	50	94
52171-1¼	6–1¼"	2–¾", 3–½"	50	94

*Holes for 7600 bar. For shallow partitions.
No. 52171 boxes not made in enamel finish.

STEEL CITY OUTLET BOXES AND COVERS

Galvanized

4-INCH SQUARE BOXES



WITH MOUNTING BRACKETS

1½ Inches Deep

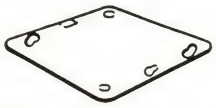
Cat. No.	Knockouts: 3 Sides Only	Knockouts: Bottom	Std. Pkg.	Wt.Lbs. Per100
52151B-½	8–½"	5–½"	50	96
52151B-¾	6–¾"	2–¾", 3–½"	50	96
52151B-½ & ¾	6–½", 3–¾"	3–½", 2–¾"	50	96
52151V-½	8–½"	5–½"	50	96
52151V-¾	6–¾"	2–¾", 3–½"	50	96
52151V-½ & ¾	6–½", 3–¾"	3–½", 2–¾"	50	96

COVERS FOR 4-INCH SQUARE BOXES

Square flat cover for single rectangular switch or receptacle.

Cat. No.	Diam. Inches	Std. Pkg.	Approx. Wt. Lbs. Per 100
52-C-0	4	50	26

Flat blank covers.



52-C-1	4	100	40



Raised closed cover; raised ⅝-inch.

52-C-2	4	100	47

Raised cover ⅝-inch high open with ears drilled and tapped, 2⅜ inches on centers to take 3¼-inch covers or box cover receptacles.



52-C-3	4	100	35



Flat cover with ½-inch knockout in center.

52-C-6	4	100	40

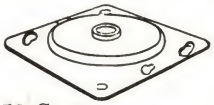
Raised cover with ½-inch knockout in center; raised ⅝-inch.



52-C-7	4	100	47

Offset raised ¼-inch, keyed for plaster. For single switch or receptacle.

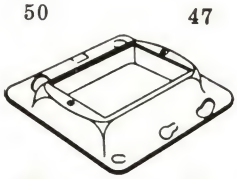
52-C-10	4	50	27



Raised drop cord cover with ⅜-inch bushed hole; raised ⅝-inch.

52-C-12	4	50	47

Raised cover for single rectangular base switch or receptacle; raised ¼-inch.



52-C-62	4	50	27

STEEL CITY OUTLET BOXES AND COVERS

Galvanized

COVERS FOR 4-INCH SQUARE BOXES

Raised cover for single rectangular base switch or receptacle; raised ½-inch.

Cat. No.	Diam. Inches	Std. Pkg.	Approx. Wt. Lbs. Per 100
52-C-13	4	50	31

Raised cover for single rectangular base switch or receptacle; raised ¾-inch.

52-C-14	4	50	35

Raised cover for single rectangular base switch or receptacle; raised 1-inch.

52-C-15	4	25	40

Raised cover for single rectangular base switch or receptacle; raised 1¼ inches.

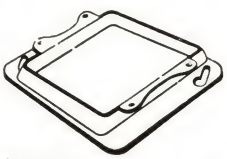
52-C-16	4	25	44

4-inch square flat cover for two rectangular switches or receptacles.

52-C-00	4	50	15

Raised cover for 2 rectangular base switches or receptacles; raised ¼-inch.

52-C-20	4	100	18



Raised cover for 2 rectangular base switches or receptacles; raised ½-inch.

52-C-17	4	50	25

Raised cover for 2 rectangular base switches or receptacles; raised ¾-inch.

52-C-18	4	50	33

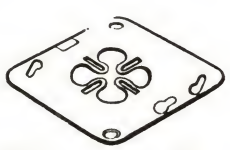
Raised cover for 2 rectangular base switches or receptacles; raised 1-inch.

52-C-19	4	25	40

Raised cover for 2 rectangular base switches or receptacles; raised 1¼ inches.

52-C-21	4	25	48

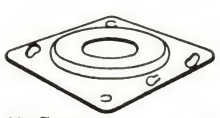
Cover for 5 and 10-ampere snap switches, wall receptacles, etc., with bolts and nuts for fastening fittings to cover; slots give range of centers, ⅞ to 1⅞ inches.



52-C-28	4	100	36

Raised cover for sign receptacles; raised ⅝-inch with 1⅛-inch keyed hole.

52-C-31	4	50	42



Raised cover for sign receptacles; raised ⅝-inch; 1½-inch opening with notch for sign receptacles with lugs on porcelain.

52-C-35	4	50	41

Raised cover with 2¾-inch opening; raised ⅝-inch.

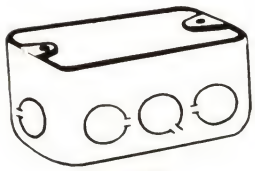


52-C-48	4	100	34

STEEL CITY UTILITY BOXES AND COVERS

Galvanized

UTILITY OUTLET BOXES



No. 58361

Stamped steel. Holes in ears 3 3/32 inches on centers to accommodate all standard receptacles, switches, etc.

Holes in bottom for fixture studs and nails.

Boxes, 2⅛ inches wide, 4 inches long.

Cat. No.	Description	Deep	Std. Pkg.	Wt. Lbs. Per 100
58351	KO's for ½": 3 each side, 1 each end, 3 bottom	1½	50	55
58361	KO's for ½": 3 each side, 1 each end, 3 bottom. When specified, two ¾" each side and bottom, 1 each end	1⅞	50	60
58371	KO's for ½": 3 each side, 1 each end, 3 bottom. For ¾" and 1": 2 each side and bottom, 1 each end	2⅛	50	64

WITH BRACKETS



No. 58361T

Boxes are 2⅛ inches wide, 4 inches long.

Cat. No.	Description	Deep	Std. Pkg.	Wt. Lbs. Per 100
58361B	KO's for ½": 3 one side, 1 each end, 3 bottom. When specified, two ¾" one side and bottom, 1 each end without Lath support	1⅞	50	72
58361V	KO's for ½": three one side, one each end, 3 in bottom. (Can be furnished with ¾" KO's: two one side and bottom, one each end. Galv. only. No lath support)	1⅞	50	76
58361T	KO's for ½": 1 one side, 1 each end, 2 bottom, no lath support	1⅞	50	72 76

STEEL CITY UTILITY BOXES AND COVERS

Galvanized

COVERS FOR UTILITY BOXES



58-C-1



58-C-3

Cat. No.	Description	Std. Pkg.	Approx. Wt. Lbs. Per 100
58-C-1	Blank Cover	20	18
58-C-3	Pushbutton Switch Cover	20	15



58-C-5



58-C-6

Cat. No.	Description	Std. Pkg.	Approx. Wt. Lbs. Per 100
58-C-5	Single Receptacle Cover	20	16
58-C-6	Cover with ½" Knockout	20	18



58-C-7



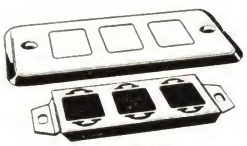
58-C-11

Cat. No.	Description	Std. Pkg.	Approx. Wt. Lbs. Per 100
58-C-7	Duplex Receptacle Cover	20	15
58-C-11	Cover with ⅜" Metal Bushing	20	22



58-C-30

Cat. No.	Description	Std. Pkg.	Approx. Wt. Lbs. Per 100
58-C-30	Toggle Switch Cover	20	17



58-C-40

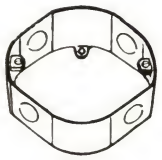
Has three knockouts so that one, two or three devices may be used in a single-gang cover by removing knockouts to be utilized.

Cat. No.	Description	Std. Pkg.	Approx. Wt. Lbs. Per 100
58-C-40	Cover with 3-hole strap for "Despard" type Wiring Devices	20	18

STEEL CITY EXTENSION RINGS

Galvanized

FOR 3¼-INCH OCTAGON BOXES



25151

No. 25151 extension ring, 1½ inches deep. Knockouts, ½ or ¾-inch, or combination ½ and ¾-inch.

Cat. No.	Knockouts	Std. Pkg.	Approx. Wt. Lbs. Per 100
25151	4—½" or ¾"	100	40

FOR 4-INCH OCTAGON BOXES

4-inch octagon extension ring. No. 55151, 1½ inches deep with ½-inch or ¾-inch knockouts. No. 55171, 2⅛ inches deep with ½, ¾, or 1-inch knockouts in sides. Have two tapped lugs at top and two untapped lugs at bottom.



55171

Cat. No.	Knockouts	Std. Pkg.	Approx. Wt. Lbs. Per 100
55151	4—½" or ¾"	50	44
55171	4—½", ¾" or 1"	50	64

FOR 4 11/16-INCH SQUARE BOXES



73171

Knockouts: No. 73151 (1½" deep)—½ or ¾-inch, or combination ½ and ¾-inch. No. 73171 (2⅛" deep)—½, ¾ or 1-inch, or combination ½ and ¾-inch or ¾ and 1-inch. Specify combination desired.

Cat. No.	Knockouts	Std. Pkg.	Approx. Wt. Lbs. Per 100
73151	As above	25	80
73171	As above	25	100

FOR 4-INCH-SQUARE BOXES

Knockouts: No. 53151 (1½" deep) — ½ or ¾-inch, or combination ½ and ¾-inch. No. 53171 (2⅛" deep)—½, ¾ or 1-inch, or combinations ½ and ¾-inch. Specify combination desired.



53171

Cat. No.	Knockouts	Std. Pkg.	Approx. Wt. Lbs. Per 100
53151	As above	50	60
53171	As above	50	70

FOR UTILITY BOX



59361

4 inches long, 2⅛ inches wide, 1⅞ inches deep. Knockouts: Eight ½-inch in sides and ends.

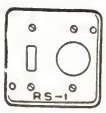
Cat. No.	Knockouts	Std. Pkg.	Approx. Wt. Lbs. Per 100
59361	8—½"	50	40

STEEL CITY 4-INCH SQUARE COVERS

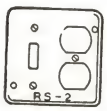
Galvanized

FOR RED SEAL WORK

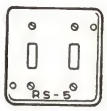
Used for exposed work, especially in Red Seal wiring jobs. They are turned down all around the edges and fit neatly over the edges of the box. Made of stamped steel.



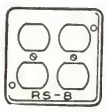
RS-1



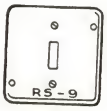
RS-2



RS-5



RS-8



RS-9



RS-11



RS-12

Cat. No.	Description	Std. Pkg.	Approx. Wt. Lbs. Per 100
RS-1	For 1 Tumbler Switch and 1 Receptacle	25	26
RS-2	For 1 Tumbler Switch and 1 Duplex Receptacle	25	25
RS-5	For 2 Square Handle Toggle Switches	25	27
RS-8	For 2 Duplex Receptacles	25	24
RS-9	For 1 Square Handle Toggle Switch	25	28
RS-11	For 1 Single Flush Receptacle	25	27
RS-12	For 1 Duplex Receptacle	25	26

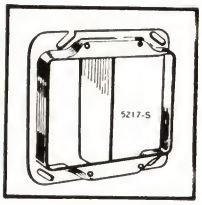
These covers are ½-inch deep.

STEEL CITY RAISED COVERS

Galvanized

4-INCH RAISED COVERS

Solid Partitions

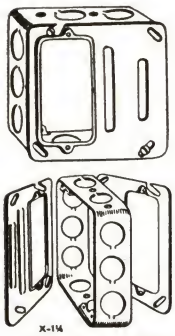


These covers are for use on all 4-inch square boxes to divide high and low-tension service. Partition fits evenly on the under side of the top of the cover and is of the exact length or height to fit flush in the bottom of the box. Partitions are permanently connected to the cover and make a very neat appearing job after installation.

Unless otherwise ordered these covers are always furnished for use with 4-inch square, 1½-inch deep boxes.

Cat. No.	Depth of Box	High In.	Std. Pkg.	Wt. Lbs. Per 100
5220-SS	1¼	¼	50	23
5217-SS	1¼	½	50	35
5218-SS	1¼	¾	50	44
5219-SS	1¼	1	25	51
5221-SS	1¼	1¼	25	55
5220-S	1½	¼	50	25
5217-S	1½	½	50	37
5218-S	1½	¾	50	46
5219-S	1½	1	25	54
5221-S	1½	1¼	25	57
5220-D	2⅛	¼	50	29
5217-D	2⅛	½	50	41
5218-D	2⅛	¾	50	50
5219-D	2⅛	1	25	56
5221-D	2⅛	1¼	25	61

STEEL CITY 4-INCH SQUARE CONVENIENCE WALL BOX



Take the place of two 4-inch square boxes and allow the switches or receptacles to come in the same position on both sides of the wall. It makes an ideal installation in 2-inch shallow wall partitions but can be used in thicker partitions by using covers of greater height.

Made of stamped steel; electro-galvanized. Furnished with four tapped ears on each side for mounting covers in any position.

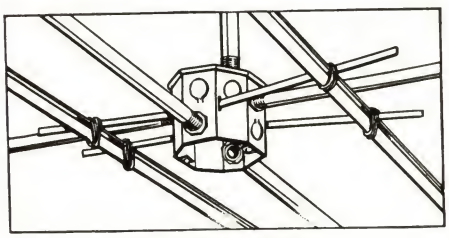
Covers extra. Two covers are needed for each box (one for each side of wall).

Cat. No.	Description	Deep In.	Std. Pkg.	Wt. Lb. Per 100
X-1¼	KO's for ½". Holes for Footed Box Supports 7502-7503	1¼	50	55
X-1½	KO's for ½", ¾", or comb. ½" and ¾"	1½	25	60
X-2⅛	KO's for ½", ¾" or 1" or comb. ½" and ¾" or ¾" and 1"	2⅛	50	90

STEEL CITY CONCRETE BOXES

KNIGHT HUNG CEILING BOXES

4-Inch Octagon Boxes — Galvanized Only



Pat. No. 1,954,481

Any length bar can be furnished. Price on request.

Cat. No.	Description	Deep	Std. Pkg.	Wt. Lbs. Per 100
H-54561	Two rows ½" and ¾" KO's, ⅜" stud. Supporting bars between upper and lower rows of KO's	3½	50	175
H-54561-¾"	Two rows all ¾" KO's, ⅜" stud. Supporting bars between upper and lower rows of KO's	3½	50	175
H-54531	Single row ½" and ¾" or all ½" or all ¾" KO's, with ⅜" stud. Supporting bar above KO's	2	50	125
H-54531-½"	Single row ½" and ¾" or all ½" or all ¾" KO's, with ½" stud. Supporting bar above KO's	2	50	125

STEEL CITY GANG BOXES, COVERS AND PARTITIONS

Galvanized Finish

Made of 14-gauge steel, electro-galvanized or sherardized. Boxes made with slots for installing partitions (barriers) for separating low and high tension wires. Holes in bottom for fixure studs and nails. In addition to knockouts specified, all boxes have two knockouts in each end for either ½ or ¾-inch conduit.

REGULAR GANG BOXES



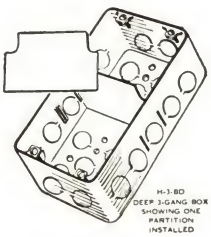
1⅝ inches deep, 4½ inches wide. Furnished with ½-inch, ¾-inch or combination ½- and ¾-inch knockouts. Specify knockouts desired, otherwise ½-inch will be furnished.

Cat. No.	Outside Lgth.	No. of Gangs	Std. Pkg.	Wt. Lbs. Per 100
2-G	6 13/16	2	5	142
3-G	8⅝	3	5	170
4-G	10½	4	5	198
5-G	12¼	5	5	235
6-G	14 1/16	6	1	260
7-G	15 15/16	7	1	300
8-G	17⅝	8	1	350
9-G	19½	9	1	395

DEEP GANG BOXES

Deep gang boxes are 2½ inches deep, 4½ inches wide.

Furnished with ½, ¾ or 1-inch knockouts, or combination ½ and ¾ or ¾ and 1-inch. Specify knockouts desired, otherwise ½-inch will be furnished.

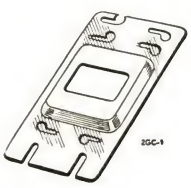


Cat. No.	Outside Lgth.	No. of Gangs	Std. Pkg.	Wt. Lbs. Per 100
H-2-BD	6 13/16	2	5	188
H-3-BD	8⅝	3	5	220
H-4-BD	10½	4	5	248
H-5-BD	12¼	5	5	300
H-6-BD	14 1/16	6	1	330

LOW VOLTAGE PARTITIONS

For Gang Boxes

Cat. No.	Description	Wt. Lbs. Per 100
SGP	For 1⅝-inch deep box	20
DGP	For 2½-inch deep box	25



SPECIAL COVERS

Cat. No.	Lgth. In.	Std. Pkg.	Wt. Lbs. Per 100
	For One Device		
2GC-1	7	5	65
	For Two Devices		
3GC-2	8 13/16	5	70
	For Three Devices		
4GC-3	10⅝	5	80

13/16" deep; 4 11/16" wide.

STEEL CITY COVERS FOR GANG BOXES

Galvanized Finish

COVERS FOR GANG BOXES

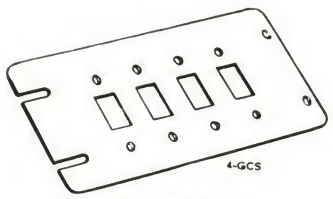


No. 2GC and 3GC covers have ears with holes spaced 3 3/32 inches on centers. Will accommodate all standard receptacles, switches, etc.

No. 4GC to 10GC covers have ears with holes spaced 1 13/16 inches on centers between gangs. Curved slots permit perfect adjustment without removing screws. Are furnished with extra slotted screw holes plugged, and situated as to fit the next smaller box, i.e. No. 4GC cover will fit both 4G and 3G boxes. Each gang box will also take the next largest cover.

Cat. No.	No. of Gangs	Dimens., Inches — Deep	Wide	Long	Std. Pkg.	Wt. Lbs. Per 100
2-GC	2	13/16	4 11/16	7	5	52
3-GC	3	13/16	4 11/16	8 13/16	5	64
4-GC	4	13/16	4 11/16	10 5/8	5	70
5-GC	5	13/16	4 11/16	12 7/16	5	80
6-GC	6	13/16	4 11/16	14 1/4	1	89
7-GC	7	13/16	4 11/16	16 1/8	1	111
8-GC	8	13/16	4 11/16	18 7/8	1	136
9-GC	9	13/16	4 11/16	19 11/16	1	148
10-GC	10	13/16	4 11/16	19 11/16	1	148

FLAT GANG COVERS FOR REGULAR GANG BOXES



Toggle Switch Cover

Can also be furnished for any combination of receptacles, switches, etc.

Cat. No. — Toggle Switch Covers	Blank Covers	No. of Gangs	Std. Pkg.	Wt. Lbs. Per 100
2GCS	2GCB	2	5	70
3GCS	3GCB	3	5	90
4GCS	4GCB	4	5	100
5GCS	5GCB	5	1	130
6GCS	6GCB	6	1	140
7GCS	7GCB	7	1	155
8GCS	8GCB	8	1	170
9GCS	9GCB	9	1	195
10GCS	10GCB	10	1	210

STEEL CITY RECEPTACLE COVERS

FOR SINGLE AND DUPLEX RECEPTACLES

Galvanized Only

Cat. No.	Size In.	Description	Std. Pkg.	Wt. Lbs. Per 100
2401LR	3¼	For single receptacle	100	16
2402LR	3¼	For duplex receptacle	50	14
5401LR	4	For single receptacle	50	24
5402LR	4	For duplex receptacle	50	22

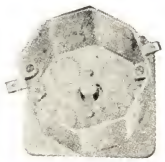
STEEL CITY CONCRETE BOXES WITH PLATES

Made of stamped steel — electro-galvanized. Knockouts are of correct size and fit snugly around the conduit, properly spaced for locknuts and bushings — this eliminates the possibility of concrete entering the box.

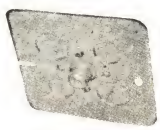
Boxes provided with punched lugs for fastening to wood forms.

Boxes furnished standard with four ½-inch and four ¾-inch knockouts, and can be furnished with combination ¾ and 1-inch knockouts if desired. Plates are furnished standard with three ½-inch and two ¾-inch knockouts, also with four holes for fixture studs.

Knockouts in combinations are so arranged that any combination for ½-inch or ¾-inch conduit is easily obtained merely by setting the box in the desired position, thus eliminating the necessity and expense of reaming or reducing knockouts.



No. 54551



No. CBP⅜

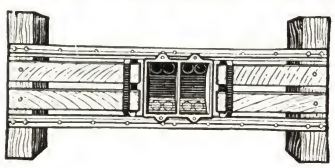
Concrete Box Rings Only

Cat. No.	Depth Inches	Diam. Inches	Std. Pkg.	Approx. Wt. Lbs. Per 100
54531	2	4	50	64
54541	2½	4	50	84
54551	3	4	50	104
54561	3½	4	20	120
54571	4	4	20	128
54581	5	4	20	165
54591	6	4	20	190

Plates Only for Concrete Boxes

Cat. No.	Description	Std. Pkg.	Approx. Wt. Lbs. Per 100
CBP	Plain Plate with 3—½" and 2—¾" Kuockouts	50	33
CBP⅜"	Same as CBP but with ⅜" Fixture Stud	50	40
CBP½"	Same as CBP but with ½" Fixture Stud	50	42

KRUSE SWITCH BOX SUPPORT



Consists of two metal strips and two lath supports. The sheet metal strips are made of Terne Plate for rust resistance. U-shaped and beaded for maximum strength. Numerous nail holes are provided for securance regardless of length used.

Sets consist of two strips and lath supports, 16½, 18½, 20½, 22½, 24½ and 26½-inch lengths.

Cat. No.	Length Inches	Std. Pkg. Sets	Cat. No.	Length Inches	Std. Pkg. Sets
8100	16½	500	8103	22½	500
8101	18½	500	8104	24½	500
8102	20½	500	8105	26½	500

STEEL CITY SWITCH BOXES

SECTIONAL SWITCH BOXES

Accommodates all standard flush switches and receptacles. Removable sides; no obstructing partitions between the sections. Holes for nailing to joist.

Boxes with beveled corners can be furnished with one-screw or two-screw adjustable ears, with adjustment up to ¾ inch. The one-screw ears are reversible for side mounting. One-screw ears will be furnished unless otherwise specified.

Pri-outs are $\frac{21}{32}$ inch to completely close opening around cable, meeting requirements of Underwriters' Laboratories. Knockouts are for ½-inch conduit and are slotted for screwdriver pri-out. Holes for studs and nails.



LC

FOR NON-METALLIC FLEXIBLE TUBING

(Loom)

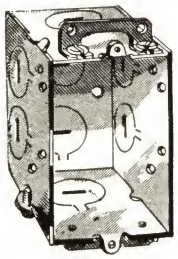
Two pri-outs each beveled end. Knockout in bottom. Nail holes in sides opposite each other through which a single nail may be driven. Leveling bumps on sides.

Cat. No.	Clamps	Sizes Inches Deep	Wide	Long	Wiring Cu. In. Cap.	Std. Pkg.	Wt. Lbs. Per 100
LC	C-1	2¼	2	3	10.8	50	62

FOR RIGID METALLIC CONDUIT

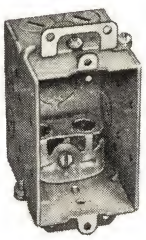
Knockouts for ¾ inch can be furnished if desired, at extra cost.

Two knockouts each side, 1 each end and 1 or 2 in bottom.



CD

Cat. No.	Clamps	Sizes Inches Deep	Wide	Long	Wiring Cu. In. Cap.	Std. Pkg.	Wt. Lbs. Per 100
CL	No	2	2	3	10.2	50	60
CD	No	2½	2	3	12.8	50	68
CW	No	2¾	2	3	14.2	50	77
CY	No	3½	2	3	18.0	50	94



LX

FOR FLEXIBLE METALLIC CONDUIT

Pri-outs are $\frac{21}{32}$ inch, knockouts are for ½-inch conduit and are slotted for screwdriver pri-out.

Two pri-outs each end and side. Knockout in bottom.

Switch Boxes with C-3 Clamps will take Type R Armored Cable

Cat. No.	Clamps	Sizes Inches Deep	Wide	Long	Wiring Cu. In. Cap.	Std. Pkg.	Wt. Lbs. Per 100
CX	C-3	3½	2	3	18.0	50	95
LX	C-3	2½	2	3	12.8	50	75
LXM	C-3	2	2	3	10.2	50	65

Units only or boxes without sides can be furnished, less than price of corresponding box.

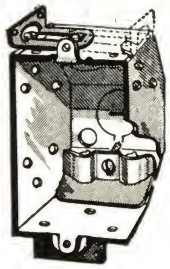
STEEL CITY SWITCH BOXES

SECTIONAL SWITCH BOXES

Boxes with beveled corners can be furnished with one-screw or two-screw adjustable ears with adjustment up to ¾ inch. The one-screw ears are reversible for side mounting. One-screw ears will be furnished unless otherwise specified.

FOR NON-METALLIC FLEXIBLE TUBING (Loom) AND NON-METALLIC SHEATHED CABLE

Switch Boxes with C-5 and C-13 Clamps will take Types T and R Non-metallic Sheathed Cable, Sizes 14-2, 12-2, and 14-3



LCN



SWB

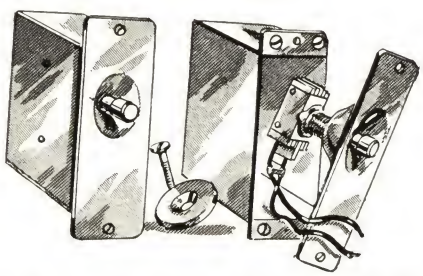
Pri-outs are $\frac{21}{32}$ inch, knockouts are for ½-inch conduit.

Cat. No.	Clamps	Sizes Inches Deep	Wide	Long	Cu. In. Cap.	Std. Pkg.	Wt. Lbs. Per 100
2 Pri-outs Each Beveled Corner, 1 KO in Bottom							
LCN	C-13	2¼	2	3	10.8	50	67
2 Pri-outs Each End and Side—1 KO in Bottom							
LXW	C-5	2½	2	3	12.8	50	74
LXMW	C-5	2	2	3	10.2	50	64
2 Pri-outs Each Side							
SSB*	No	1	2	3	4.7	100	35
2 Pri-outs Each End							
SWB*	C-5	1½	2	3	7.6	50	58

*These boxes equipped with lugs and mounting ears. Non-gangable.

Units only or boxes without sides can be furnished, less than price of corresponding box.

DOOR SWITCH



For new or old work. Consists of galvanized steel box, cover, striking plate, switch and necessary screws. Types DS-25 and DS-30 for new work. Types DS-25-V and DS-30-V are furnished with metal plate, 4 inches long, 1½ inches wide, for old work. Switch, with wire leads: 6 amp., 125 volts; 3 amp., 250 volts.

Cat. No.	Description	O.D. Box Inches	Std. Pkg.	Wt. Lbs. Per 100
Light On When Door is Open				
DS-25	For new work	$1\frac{1}{2}$x$1\frac{3}{8}$x$2\frac{11}{16}$	10	56
DS-25-V	For old work	$1\frac{1}{2}$x$1\frac{3}{8}$x$2\frac{11}{16}$	10	68
Light On When Door is Closed				
DS-30	For new work	$1\frac{1}{2}$x$1\frac{3}{8}$x$2\frac{11}{16}$	10	56
DS-30-V	For old work	$1\frac{1}{2}$x$1\frac{3}{8}$x$2\frac{11}{16}$	10	68

Knockouts: ½-inch for conduit, 1 each end and 1 in bottom.

STEEL CITY SWITCH BOXES

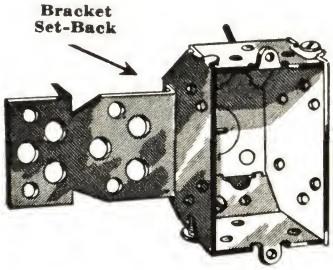
BRACKET SWITCH BOXES

Without Lath Supports—Bracket Welded to Box

All bracket type switch boxes can be furnished with bracket set-back 1⅛ inches from face of box for use with wall board, over which plaster is installed. Boxes of this type cost the same as standard equivalent and can be identified by adding the letter "K" to the standard catalog number.

Pointed projections for gauging and bracing. Nail holes placed to prevent splitting of studding. Holes provided to key plaster.

FOR NON-METALLIC FLEXIBLE TUBING (Loom)



Pri-outs are $\frac{21}{32}$ inch, knockouts for ½-inch conduit.

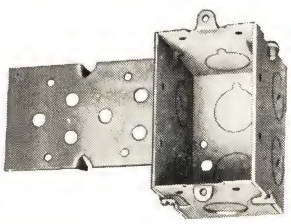
Beveled boxes — Pri-outs: two in each beveled corner. Knockouts, one in bottom.

Cat. No.	Clamps	Size, Inches Deep	Wide	Long	Cu. In. Cap.	Std. Pkg.	Wt. Lbs. Per 100
800-S	No	2¼	2	3	10.8	50	70

FOR RIGID METALLIC CONDUIT

Nos. 803-S to 805-S incl., knockouts for ½-inch conduit: two each side, one each end, one or two in bottom.

No. 58361-BL Utility Outlet Box. KO's: one each end, three in bottom. (Can be furnished for ¾-inch conduit: One each end, two in bottom.)



No. 58361-B. KO's: Three in one side, one each end, three in bottom, without lath support.

Cat. No.	Clamps	Size, Inches Deep	Wide	Long	Cu. In. Cap.	Std. Pkg.	Wt. Lbs. Per 100
803-S	No	2¾	2	3	14.2	50	87
804-S	No	2½	2	3	12.8	50	78
805-S	No	2	2	3	10.2	50	70
58361-B	No	1⅞	2⅛	4	16.0	50	82

Units only or boxes without plain sides can be furnished, less than price of corresponding box.

STEEL CITY SWITCH BOXES

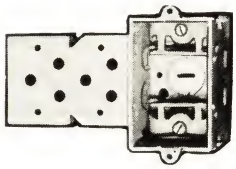
BRACKET SWITCH BOXES

With or Without Lath Supports — Bracket Welded to Box

Pointed projections for gauging and bracing. Nail holes placed to prevent splitting of studding. Holes provided to key plaster.

FOR FLEXIBLE METALLIC CONDUIT AND ARMORED CABLE

Switch Boxes with C-3 Clamps will take Type R Armored Cable



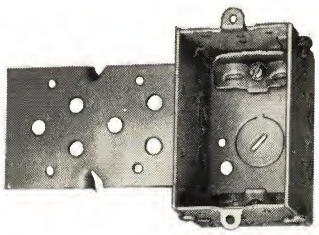
Pri-outs are $\frac{21}{32}$ inch. Knockouts are for ½-inch conduit.

Two pri-outs in both ends and sides. Knockout in bottom.

Cat. No.	Clamps	Size, Inches Deep	Wide	Long	Cu. In. Cap.	Std. Pkg.	Wt. Lbs. Per 100
806-S	C-3	2½	2	3	12.8	50	85
807-S	C-3	2	2	3	10.2	50	75

FOR NON-METALLIC SHEATHED CABLE

Switch Boxes with C-5 Clamps will take Type T Non-metallic Sheathed Cable, Sizes 14-2, 12-2, and 14-3



Pri-outs $\frac{21}{32}$-inch: two in ends and sides. KO for ½-inch conduit in bottom.

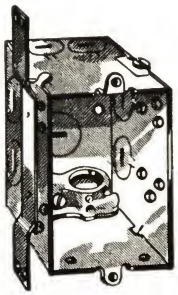
Add "K" to catalog number for boxes with brackets set back 1⅛ inches from face of box, for use with wall board over which plaster is installed.

Cat. No.	Clamps	Size, Inches Deep	Wide	Long	Cu. In. Cap.	Std. Pkg.	Wt. Lbs. Per 100
806-SW	C-5	2½	2	3	12.8	50	84
807-SW	C-5	2	2	3	10.2	50	74
802-SN	C-2	2¼	2	3	10.8	50	77

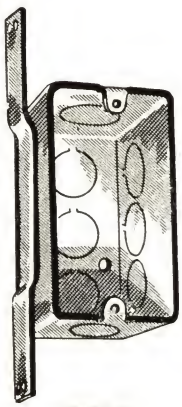
STEEL CITY SWITCH BOXES

"V" TYPE BRACKET SWITCH BOXES

No Lath Supports



LXV



58361-V

For use in wall board, beaver board, veneer board and plaster board construction. Provides a mounting that simplifies installations where wall, veneer or other boards are used. The flat "V" type bracket, spot welded onto the long side of a standard switch box, provides an easy means for solidly mounting the switch box to the wide side of a 2x4, without channeling out wall board or studding. The edges of the switch box comes perfectly flush with the outer surface of the board.

For Non-Metallic Flexible Tubing (Loom)

Cat. No.	Clamps	Size, Inches Deep	Wide	Long	Wiring Cu. In. Cap.	Std. Pkg.	Wt. Lbs. Per 100
Two 21/32" Pri-outs each Beveled Corner — One ½" KO in Bottom							
LOV	No	2¼	2	3	10.8	50	72
LCV	C-1	2¼	2	3	10.8	50	76
Two 21/32" Pri-outs Each End and One Side — One ½" KO in Bottom							
LCNV	C-13	2¼	2	3	10.8	50	79
LXWV	C-5	2½	2	3	12.8	50	85
LXMWV	C-5	2	2	3	10.2	50	75

For Flexible Metallic Conduit

Two 21/32" Pri-outs Each End and One Side — One ½" KO in Bottom							
LXV	C-3	2½	2	3	12.8	50	85
LXMV	C-3	2	2	3	10.2	50	75

For Rigid Metallic Conduit

KO's ½" for Conduit — One Each End, Two Each Side, One or Two Bottom							
CLV	No	2	2	3	10.2	50	72
CDV	No	2½	2	3	12.8	50	80
CWV	No	2¾	2	3	14.2	50	89

Utility Outlet Box

½" KO's: Three One Side, One Each End, Three in Bottom							
58361-V*	No	1⅞	2⅛	4	16.0	50	76
½" KO: Eight in Sides, Five in Bottom							
52151-V	No	1½	4	4	21.1	50	96
KO's: Six ¾" in Sides, Two ¾" and Three ½" in Bottom							
52151-V	No	1½	4	4	21.1	50	96
KO's: Six ½" and Three ¾" in Sides, Three ½" and Two ¾" in Bottom							
52151-V	No	1½	4	4	21.1	50	96

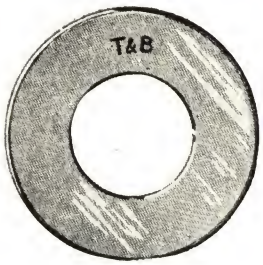
*Can be furnished with ¾-inch knockouts: two one side and bottom, one each end. Galvanized only. No lath support.

Units only or boxes without plain sides can be furnished, less than price of corresponding box.

T & B RIGID CONDUIT FITTINGS

T & B REDUCING WASHERS

Approved by Underwriters' Laboratories



T & B Reducing Washers are designed to reduce the size of knockouts in outlet boxes.

Made of steel and galvanized.

Cat. No.	Size, Inches K.O.	Conduit	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
3700	¾	to ⅜	250	500	1½	**$ 2.80**
3701	¾	to ½	250	500	1½	**2.40**
3702	1	to ⅜	125	250	1½	**5.10**
3703	1	to ½	125	250	2	**4.15**
3704	1	to ¾	125	250	2	**4.15**
3705	1¼	to ⅜	125	250	4	**7.85**
3706	1¼	to ½	125	250	2½	**7.85**
3707	1¼	to ¾	125	250	3	**6.70**
3708	1¼	to 1	125	250	6	**6.70**
3709	1½	to ⅜	50	100	6	**9.45**
3710	1½	to ½	50	100	6	**9.45**
3711	1½	to ¾	50	100	6	**9.45**
3712	1½	to 1	50	100	4	**7.85**
3713	1½	to 1¼	50	100	4	**7.85**
3714	2	to ½	50	100	9	**12.30**
3715	2	to ¾	50	100	9	**12.30**
3716	2	to 1	50	100	8	**10.10**
3717	2	to 1¼	50	100	6	**10.10**
3718	2	to 1½	50	100	6	**10.10**
3724	2½	to 2	25	100	11	**19.20**

T & B "SLIP-IN" FIXTURE STUD

The T & B "Slip-In" Fixture Stud can be installed from interior of box, without removal of parts. It occupies the minimum of space, allowing ample room for wires. There are no small nuts and bolts to lose. Underwriters' approved; plated with Tabolite Superior Galvanizing.



Cat. No.	Size In.	Description	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 1000	Price Per 1000
1601	⅜	Hollow Stem	100	500	70	**$140.00**

T & B HICKEY FIXTURE STUD

Approved by Underwriters' Laboratories

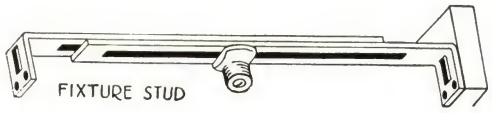


This Stud is of Malleable Iron, and is furnished in Tabolite — the superior galvanized finish. All four prongs have extra long slots to allow adjustment. With this stud no Hickeys are required on straight electrical work.

Cat. No.	Size Stud	Unit Pkg.	Std. Pkg.	Wt. Lbs. Per 1000	Price Per 1000
16	⅜	100	1000	76	**$80.00**

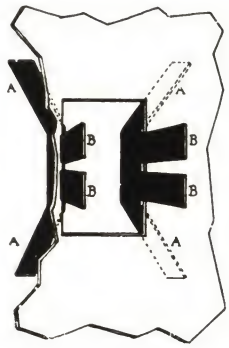
MADISON SWITCH AND OUTLET BOX SUPPORTS

12-IN-1 ADJUSTABLE BAR HANGER



Goes in between the joist and gives a flush job on all material. One bar takes the place of all other six in shape and length. 12 to 24-inch centers. No notching of joist. Can be used for any type box; also, for hanging flush type cabinets and flush type lighting fixtures.

Cat. No.	Description	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
115A	Bar Hanger and Stud	50	65	$.....

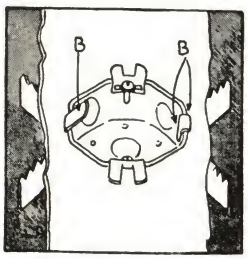


NO. 102 HOLDIT SWITCH BOX SUPPORT

Two metal holders for installing switch boxes in old work. Mounts on lath and plaster, beaver board, sheet rock, metal lath, etc. Makes a positive and rigid installation.

Cat. No.	Standard Package	Price Per 100 Sets
102	500 Sets	$.....

NO. 103 HOLDIT OUTLET BOX SUPPORT



Two metal holders and ears for installing outlet boxes in old work or walls or beaver board, sheet rock, metal lath and lath plaster. Standard package, 500 sets; weight per 100 pieces, 26 pounds.

Price, No. **103** Holdit Outlet Box Support Per 100 sets..... $.....



ADJUSTABLE BAR HANGER

Can be fastened on I-beam without drilling. Support and bolts to hold bar hangers to I-beam.

Cat. No.	Description	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
118A	2½" I-Beam	100	10	$.....
118B	6½" I-Beam	100	12½	.....

T & B CAST IRON JUNCTION BOXES AND COVERS

FLANGED AND UNFLANGED TYPES

Approved by Underwriters' Laboratories



Unflanged



Flanged

Flanged and unflanged cast iron boxes are watertight and weatherproof when gasketed. They are heavy walled boxes designed to meet the most rigid requirements of subway, industrial, marine, underground work, etc. Thinner walled boxes may be furnished, if desired, at less cost.

Boxes listed are all hot dip galvanized. Drilling and tapping information on request.

Unflanged (Surface) Type

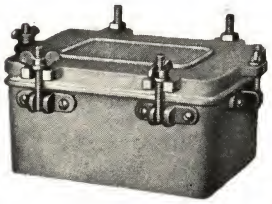
Cat. No.	Size Inches Wdth.	Lgth.	Dpth.	Box Only Each	Box and Cover Each	Wt.Lbs. Complete	Gasket Each
10861	4	4	2	$ 2.00	$ 2.70	3½	$0.40
10862	4	4	3	2.20	3.00	5	.40
10601	4	6	3	4.10	4.80	6	.60
10703	4	6	4	4.40	5.40	7	.60
10962	6	6	3	4.60	6.40	9	.95
10868	6	6	4	5.40	7.20	9	.95
10964	6	6	6	7.20	9.00	12½	.95
10871	6	8	3	6.00	7.80	10½	1.20
10872	6	8	4	7.20	9.00	12½	1.20
10874	6	8	6	9.00	10.80	15	1.20
10880	6	12	3	9.40	13.80	19	2.00
10968	6	12	4	10.60	15.00	13	2.00
10882	6	12	6	11.80	16.20	23½	2.00
10876	8	8	6	14.00	16.20	23	1.80
10718	8	12	6	18.40	21.60	34	2.30
10969	12	12	6	20.60	26.40	41	3.10

Flanged (Flush) Type

10897	6	6	3	$ 5.60	$ 8.40	10	$1.20
10898	6	6	4	7.40	10.20	10	1.20
10915	6	6	6	8.60	11.40	16	1.20
10900	6	8	3	9.20	12.00	13	1.40
10902	6	8	4	9.80	12.60	15	1.40
10916	6	8	6	11.00	13.80	18	1.40
10906	6	12	3	11.40	14.40	16	2.00
10908	6	12	4	13.20	16.20	19	2.00
10910	6	12	6	24.00	27.00	40	2.00
10904	8	8	6	14.00	18.00	22	1.80
10764	8	12	6	21.00	27.60	39	2.30
10911	12	12	6	31.20	39.60	56	2.30
10771	12	18	12	72.00	84.00	104	2.80
10785	12	24	12	82.80	102.00	139	5.90

WEATHERPROOF CAST IRON JUNCTION BOXES

Approved by Underwriters' Laboratories



Sturdy boxes built for rugged service. Hinged covers, supplied with thumb nuts on all 4 sides, making a watertight weatherproof job when tightened. All weatherproof type boxes are furnished with gaskets as standard equipment.

Cat. No.	Size Inches	Wt. Lbs. Box Complete	Price Each
10503	6 x 8 x 4	15	$24.00
10511	8 x 8 x 6	24	30.00
10538	8 x 12 x 6	34	43.20
10539	12 x 12 x 6	57	57.60
10535	12 x 16 x 8	80	84.00
10547	18 x 18 x 8	17	115.00

ISERT CUTOUT BOXES AND CABINETS

TYPE "A" SURFACE CABINETS



Style "A" Box

The boxes listed below are made to conform with Underwriters' Laboratories requirements and bear Underwriters' labels.

This style of cabinet is adapted to nearly all installations where a cabinet for surface mounting is required to be used as junction, service, switch, panel or cutout cabinet.

All boxes electrically welded and furnished with tight door flanged on four sides, knockouts, and with dependable catch. Smaller boxes have ring pull which lies flush with door when boxes are not in use for convenience in stacking.

H. In.	W. In.	3 Inches Deep	4 Inches Deep	6 Inches Deep	8 Inches Deep	10 Inches Deep	12 Inches Deep
4½	5	$1.60					
4½	9	2.20					
6	6	2.00	$2.50	$2.70			
8	6	2.40	2.90	3.16			
6	9	2.60	3.10	3.40			
12	6	3.10	3.66	4.10			
8	8	2.80	3.36	3.74	$4.80		
10	8	3.16	3.70	4.20	5.36		
12	8	3.64	4.20	4.80	6.04		
9	9	3.26	3.80	4.30	5.40		
12	9	3.90	4.50	5.10	6.40		
10	10	3.50	4.30	4.86	6.14	$7.20	
12	10	4.20	4.70	5.40	6.80	8.14	
15	10	4.80	5.40	6.20	7.70	8.94	
18	10	5.40	6.00	6.94	8.60	9.86	
12	12	4.70	5.26	6.00	7.50	8.70	$10.20
15	12	5.40	5.90	6.84	8.46	9.74	11.24
18	12		6.60	7.60	9.34	10.66	12.20
24	12		7.60	8.86	10.86	12.14	13.66
15	15		6.70	7.70	9.50	10.80	12.30
18	15		7.30	8.50	10.40	11.76	13.24
24	15		8.40	9.76	11.90	13.20	14.46
18	18		8.10	9.30	11.34	12.90	14.34
30	12		15.36	17.10	20.10	22.30	24.60
36	12		17.34	20.30	22.80	25.30	27.90
30	15		17.60	20.04	23.20	25.60	28.00
36	15		20.00	24.00	26.64	29.30	32.00
21	18		15.40	17.34	19.90	22.20	24.40
24	18		16.94	19.10	22.00	24.30	26.50
30	18		19.80	23.00	26.34	28.80	31.50
36	18		22.10	27.20	30.00	32.80	35.60
40	18		23.36	29.80	32.80	35.80	38.80
24	24		20.60	23.94	27.30	29.90	32.46
30	24		23.54	28.76	32.56	35.46	38.30
36	24		26.20	33.60	37.14	40.20	43.30
40	24		27.80	36.20	39.90	43.50	47.10
30	30		35.40	43.46	47.60	50.84	54.00
44	24		47.70	52.50	57.20	62.00	66.80
48	24		51.70	56.70	61.76	66.80	71.90
36	30		56.76	61.40	66.10	70.70	75.40
42	30		64.80	69.70	74.60	79.50	81.60
48	30		72.84	78.00	83.16	88.30	93.40
36	36		64.10	69.00	73.90	79.56	84.66

First dimension indicates hinge side.

ISERT CUTOUT BOXES AND CABINETS

TYPE "A" SURFACE CABINETS

H. In.	W. In.	4 Inches Deep	6 Inches Deep	8 Inches Deep	10 Inches Deep	12 Inches Deep
54	30	$90.96	$97.60	$104.26	$110.90	$117.56
60	30	99.46	106.56	113.60	120.70	127.80
66	30	107.96	115.56	122.96	130.50	138.00
72	30	116.46	124.40	132.36	140.30	148.26
42	36	87.20	94.00	100.80	107.56	114.26
48	36	97.76	105.46	113.16	120.86	128.50
54	36	108.26	116.90	125.56	134.16	142.70
60	36	118.80	128.36	137.90	147.46	156.96
66	36	129.30	139.80	150.30	160.76	171.16
72	36	139.86	151.26	162.70	174.06	185.40
78	36	150.36	162.70	175.06	187.36	199.66
84	36	160.90	174.16	187.40	200.66	213.90
42	42	96.16	102.70	109.26	115.86	122.40
48	42	107.20	114.26	121.36	128.50	135.56
54	42	118.26	125.86	133.46	141.16	148.70
60	42	129.26	137.40	145.06	153.80	161.90
66	42	140.30	149.00	157.16	171.46	175.06
72	42	151.36	160.56	169.76	184.06	188.20
78	42	162.36	172.10	181.86	196.70	201.40
84	42	173.40	183.70	193.96	209.36	214.56
90	42	184.40	195.26	206.06	222.00	227.76
96	42	195.46	206.86	218.20	229.60	240.96
48	48	119.36	127.06	134.70	142.40	150.06
54	48	132.16	140.26	148.36	156.46	164.60
60	48	144.90	153.46	162.00	170.56	179.16
66	48	157.70	166.70	175.70	184.70	193.76
72	48	170.50	179.96	189.40	198.86	208.30
78	48	183.26	193.16	203.06	212.96	222.86
84	48	196.10	206.40	216.76	227.10	237.46
90	48	208.86	219.76	230.66	241.56	252.00
96	48	221.60	232.86	244.10	255.36	266.60
54	54	146.70	155.16	163.60	172.06	180.50
60	54	160.80	169.76	178.66	187.60	196.50
66	54	174.90	184.30	193.70	203.10	212.50
72	54	189.06	198.88	208.76	218.66	228.50
78	54	203.16	213.50	223.80	234.16	244.50
84	54	217.26	228.10	238.86	249.70	260.50
90	54	231.10	242.70	253.96	265.20	276.50
96	54	245.50	257.26	269.00	280.76	292.50
60	60	175.90	185.40	194.90	204.40	213.96
66	60	191.46	201.46	211.36	220.86	231.36
72	60	206.96	217.56	227.80	237.80	248.76
78	60	222.50	233.60	244.20	254.80	266.16
84	60	238.06	249.66	260.70	271.76	283.56
90	60	253.56	265.70	277.10	288.70	300.96
96	60	269.10	281.30	293.50	305.70	317.90

First dimension indicates hinge side.

CODE REQUIREMENTS

When No Surface Area Exceeds	When No Single Dimension Is Over	Gauge Steel
360 Sq. In.	24″	No. 16
1000 Sq. In.	40″	No. 14
1500 Sq. In.	60″	No. 12
Over 1500 Sq. In.	Over 60″	No. 10

ISERT SCREW COVER PULL BOXES

TYPE "SC" SCREW COVER PULL BOXES



Screw Cover Pull Box



Flush Screw Cover Pull Box

The Screw Cover Pull Box is made with all four edges flanged in and with flat removable covers fastened with machine screws.

The Flush Screw Cover Pull Box is made with flat removable cover fastened with machine screws.

Boxes in this List are Priced in No. 16 Gauge Steel

The list prices of sizes which are omitted in this list must be made of heavier gauge steel to conform with National Electrical Code.

Long	Wide	3 Inches Deep	4 Inches Deep	6 Inches Deep	8 Inches Deep	10 Inches Deep	12 Inches Deep
4½	5	$1.98	.....	.....	.....	.....	.....
4½	9	2.76	.....	.....	.....	.....	.....
6	6	2.54	$3.14	$3.35	.....	.....	.....
8	6	3.00	3.64	3.96	.....	.....	.....
9	6	3.24	3.88	4.26	.....	.....	.....
12	6	3.88	4.58	5.14	.....	.....	.....
8	8	3.54	4.20	4.68	$5.98	.....	.....
10	8	3.96	4.66	5.26	6.70	.....	.....
12	8	4.56	5.28	5.98	7.56	.....	.....
9	9	4.08	4.76	5.36	6.78	.....	.....
12	9	4.90	5.60	6.36	8.08	.....	.....
10	10	4.36	5.36	6.08	7.68	$9.04	.....
12	10	5.24	5.90	6.76	8.48	10.18	.....
15	10	6.04	6.76	7.74	9.66	11.18	.....
18	10	6.78	7.50	8.68	10.74	12.34	.....
12	12	5.86	6.58	7.50	9.38	10.88	$12.74
15	12	6.74	7.40	8.56	10.58	12.18	14.06
18	12	.....	8.24	9.50	11.68	13.34	15.28
24	12	.....	9.54	11.08	13.58	15.18	17.08
15	15	.....	8.36	9.66	11.88	13.54	15.40
18	15	.....	9.16	10.64	13.04	14.70	16.54
24	15	.....	10.48	12.20	14.88	16.48	18.08
18	18	.....	10.10	11.64	14.18	16.14	17.94

Screw cover mounted on length-width dimension.

ISERT SCREW COVER PULL BOXES

TYPE "SC" SCREW COVER PULL BOXES

Boxes in this List are Priced in No. 14 Gauge Steel

The list prices of sizes which are omitted in this list must be made of heavier gauge steel to conform with National Electrical Code.

Long	Wide	3 Inches Deep	4 Inches Deep	6 Inches Deep	8 Inches Deep	10 Inches Deep	12 Inches Deep
6	6	$3.16	$3.92	$4.20	.....	.....	.....
8	6	3.76	4.54	4.94	.....	.....	.....
9	6	4.04	4.86	5.30	.....	.....	.....
12	6	4.86	5.74	6.40	.....	.....	.....
8	8	4.40	5.26	5.86	$7.48	.....	.....
10	8	4.94	5.80	6.56	8.38	.....	.....
12	8	5.70	6.60	7.48	9.44	.....	.....
9	9	5.10	5.94	6.68	8.48	.....	.....
12	9	6.14	7.00	7.94	10.04	.....	.....
10	10	5.44	6.70	7.60	9.60	$11.30	.....
12	10	7.80	7.38	8.44	10.60	12.74	.....
15	10	7.54	8.44	9.66	12.06	13.98	.....
18	10	8.48	9.38	10.86	13.40	15.40	.....
12	12	7.30	8.24	9.38	11.74	13.60	$15.90
15	12	8.40	9.26	10.70	13.24	15.24	17.56
18	12	.....	10.30	11.88	14.60	16.66	19.10
24	12	.....	11.90	13.86	16.98	18.98	21.36
15	15	.....	10.44	12.06	14.84	16.90	19.26
18	15	.....	11.44	13.30	16.30	18.38	20.70
24	15	.....	13.10	15.10	18.60	20.60	22.60
18	18	.....	12.64	14.54	17.74	20.16	22.40
30	12	.....	19.20	21.38	25.14	27.90	30.76
36	12	.....	21.68	25.36	28.50	31.66	34.88
30	15	.....	22.00	25.06	29.04	32.02	35.04
36	15	.....	25.00	30.00	33.30	36.60	40.00
21	18	.....	19.28	21.68	24.86	27.74	30.50
24	18	.....	21.18	23.86	27.48	30.38	33.10
30	18	.....	24.76	28.74	32.94	36.00	39.38
36	18	.....	27.60	33.98	37.50	41.04	44.50
40	18	.....	29.20	37.28	41.04	44.78	48.54
24	24	.....	25.78	29.94	34.16	37.36	40.58
30	24	.....	29.44	35.96	40.70	44.34	47.86
36	24	.....	32.78	42.00	46.44	50.26	54.16
40	24	.....	34.76	45.24	49.88	54.38	58.88
30	30	.....	35.38	43.46	47.60	50.84	54.00

The Boxes in this List are Priced in No. 12 Gauge Steel

6	6	$4.44	$5.48	$5.86	.....	.....	.....
8	6	5.26	6.36	6.90	.....	.....	.....
9	6	5.64	6.70	7.44	.....	.....	.....
12	6	6.80	8.02	8.98	.....	.....	.....
8	8	6.18	7.36	8.20	$10.48	.....	.....
10	8	6.90	8.14	9.20	11.72	.....	.....
12	8	7.96	9.24	10.48	13.20	.....	.....
9	9	7.14	8.30	9.36	11.86	.....	.....
12	9	8.58	9.80	11.10	14.06	.....	.....
10	10	7.60	9.36	10.64	13.44	$15.80	.....
12	10	9.16	10.34	11.80	14.84	17.82	.....
15	10	10.54	11.80	13.54	16.90	19.56	.....
18	10	11.86	13.14	15.20	18.78	21.58	.....
12	12	10.24	11.52	13.14	16.42	19.04	$22.28
15	12	11.78	12.96	14.96	18.52	21.32	24.58
18	12	.....	14.40	16.64	20.44	23.34	26.74
24	12	.....	16.68	19.40	23.76	26.58	29.88
15	15	.....	14.60	16.88	20.80	23.68	26.96
18	15	.....	16.00	18.60	22.80	25.74	28.96
24	15	.....	18.34	21.36	26.04	28.84	31.64
18	18	.....	17.68	20.36	24.82	28.24	31.38

Screw Cover Mounted on Length-Width Dimension.

CROUSE-HINDS CONDULETS

DISCOUNT SCHEDULE—Unless otherwise specified, Condulets carry Crouse-Hinds CD Schedule of terms and discounts.

FINISH—Unless otherwise indicated, the standard finish is cadmium-galvanized.

MATERIAL—Unless otherwise indicated, all Condulets are made of Feraloy, a special Crouse-Hinds alloy.

Crouse-Hinds "complete line" is more than just a range of sizes — **there is a Condulet for every need and purpose.**

Feraloy is a special alloy having the desirable characteristics of both cast steel and gray iron. It is the result of many years of study and development. Feraloy possesses high tensile strength and unusual resistance to corrosion.

Condulets will be found to stand up under the trying conditions of installation and subsequent use.

(Condulets are made only by Crouse-Hinds)

OBROUND SERIES CONDULETS

Obround Condulets of the same size take the same covers and wiring devices.

Threaded for Rigid Conduit (Thick Wall)

Type A



Cat. No.	List, Each
A17	$0.60
A27	.70
A37	1.00
A47	1.60
A57	2.08
A67	4.28
A77	8.40
A87	10.00
A97	14.00
A107	18.00

Type B*



Size	Cat. No.	List, Each
½	B17	$0.60
¾	B27	.70
1	B37	1.00
1¼	B47	2.50
1½	B57	3.00
2	B67	5.20
2½	B77	16.30
3	B87	18.00
3½	B97	30.50
4	B107	34.00

Type C



Cat. No.	List, Each
C17	$0.77
C27	.86
C37	1.30
C47	2.10
C57	2.80
C67	4.80
C77	10.00
C87	13.00
C97	21.00
C107	24.00

Type E



Size	Cat. No.	List, Each
½	E17	$0.60
¾	E27	.70
1	E37	1.00
1¼	E47	1.60
1½	E57	2.08
2	E67	4.28
2½	E77	8.40
3	E87	10.00
3½	E97	14.00
4	E107	18.00

*One-piece body, ½ to 1 inch; two-piece body, 1¼ to 4 inch.

OBROUND SERIES CONDULETS

Threaded for Rigid Conduit (Thick Wall)

Type LB



Cat. No.	List, Each
LB17	$0.77
LB27	.86
LB37	1.30
LB47	2.10
LB57	2.80
LB67	4.80
LB777	10.00
LB87	13.00
LB97	21.00
LB107	24.00

Type LR



Size	Cat. No.	List, Each
½	LR17	$0.77
¾	LR27	.86
1	LR37	1.30
1¼	LR47	2.10
1½	LR57	2.80
2	LR67	4.80
2½	LR777	10.00
3	LR87	13.00
3½	LR97	21.00
4	LR107	24.00

Type LL



Cat. No.	List, Each
LL17	$0.77
LL27	.86
LL37	1.30
LL47	2.10
LL57	2.80
LL67	4.80
LL777	10.00
LL87	13.00
LL97	21.00
LL107	24.00

Type LF



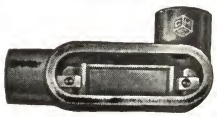
Size	Cat. No.	List, Each
½	LF17	$0.80
¾	LF27	.90
1	LF37	1.30
1¼	LF47	2.10
1½	LF57	2.80
2	LF67	4.80
2½	LF777	10.00
3	LF87	13.00
3½	LF97	21.00
4	LF107	24.00

CROUSE-HINDS CONDULETS

OBROUND SERIES CONDULETS

Threaded for Rigid Conduit (Thick Wall)

Type L†



Cat. No.	List, Each	Size
L17	$0.80	½
L27	.90	¾
L37	1.30	1
L47	2.10	1¼
L57	2.80	1½
L67	4.80	2

Type TA



Cat. No.	List, Each
TA17	$1.40
TA27	1.50
TA37	2.00
TA47	3.10
TA57	4.60
TA67	7.90

Type T‡

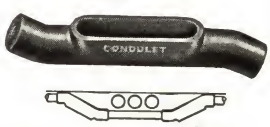


Type TB‡



		A-B-C		
T17	$0.94	½–½–½	TB17	$0.96
T127	1.12	½–¾–½	.....	.....
T217	1.14	¾–½–¾	.....	.....
T27	1.10	¾–¾–¾	TB27	1.14
T237	1.30	¾–1–¾	TB237	1.30
T317	1.60	1–½–1	TB317	1.60
T327	1.60	1–¾–1	TB327	1.60
T37	1.60	1–1–1	TB37	1.60
T417	2.44	1¼–½–1¼	.....	.....
T427	2.44	1¼–¾–1¼	.....	.....
T437	2.44	1¼–1–1¼	.....	.....
T47	2.44	1¼–1¼–1¼	TB47	2.44
T517	3.38	1½–½–1½	.....	.....
T527	3.38	1½–¾–1½	.....	.....
T537	3.38	1½–1–1½	.....	.....
T547	3.38	1½–1¼–1½	.....	.....
T57	3.38	1½–1½–1½	TB57	3.38
T647	5.10	2–1¼–2	.....	.....
T657	5.10	2–1½–2	.....	.....
T67	5.10	2–2–2	TB67	5.10
T77	10.00	2½–2½–2½	TB77	10.00
T87	15.00	3–3–3	TB87	15.00
T97	22.00	3½–3½–3½	TB97	22.00
T107	26.00	4–4–4	TB107	26.00

Type COV



Type CUB



Cat. No.	List, Each	Size Pipe Crossed	Size
COV147	$1.00	1¼	½
COV247	1.30	1¼	¾
COV347	1.50	1¼	1
COV457	2.50	1½	1¼
COV567	3.20	2	1½
COV677	6.50	2½	2

Cat. No.	List, Each	Size Pipe Crossed
CUB127	$1.50	¾
CUB147	1.70	1¼
CUB247	1.90	1¼
CUB347	2.80	1¼
CUB457	3.80	1½
CUB567	4.80	2
CUB677	9.60	2½

†Type L Condulets have two openings, with one blank sheet steel cover. Can be used for either an LL or LR.

‡The size of the cover or wiring device is the same as size of hubs at ends of cover opening.

CROUSE-HINDS CONDULETS

OBROUND SERIES CONDULETS

Threaded for Rigid Conduit (Thick Wall)

Type F



Cat. No.	List, Each	Size
F17	$1.40	½
F27	2.00	¾
F37	2.90	1
F47	5.60	1¼
F57	7.00	1½
F67	10.00	2
F77	19.00	2½
F87	21.00	3
F97	39.00	3½
F107	50.00	4
F0117	90.00	4½
F0127	95.00	5
F0147	100.00	6

Type CO

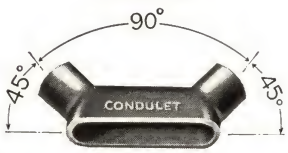


Cat. No.	List, Each
CO17	$1.00
CO27	1.30
CO37	1.50
CO47	2.50
CO57	3.20
CO67	6.50
CO777	10.40
CO87	15.80
CO97	25.20
CO107	27.60
.....	.....
.....	.....
.....	.....

Type U

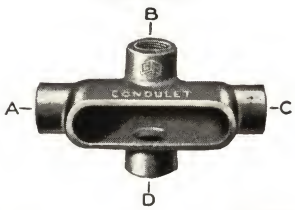


Type UB

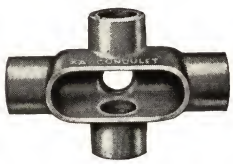


U17	$0.96	½	UB17	$0.96
U27	1.08	¾	UB27	1.08
U37	1.56	1	UB37	1.56
U47	2.52	1¼	UB47	2.52
U57	3.36	1½	UB57	3.36
U67	6.00	2	UB67	6.00
U777	12.00	2½	UB777	12.00
U87	15.60	3	UB87	15.60
U97	25.20	3½	UB97	25.20
.....	.....	4	UB107	28.80

Type X‡



Type XA



		A-B-C-D		
X17	$1.20	½–½–½–½	XA17	$2.00
X217	1.54	¾–½–¾–½	.....	.....
X27	1.54	¾–¾–¾–¾	XA27	2.30
X317	2.10	1–½–1–½	.....	.....
X327	2.10	1–¾–1–¾	.....	.....
X37	2.10	1–1–1–1	XA37	2.90
X417	2.80	1¼–½–1¼–½		
X427	2.80	1¼–¾–1¼–¾		
X47	2.80	1¼-1¼-1¼-1¼		
X527	3.56	1½–¾–1½–¾		
X57	3.56	1½-1½-1½-1½		
X67	7.00	2–2–2–2		
X77	12.00	2½-2½-2½-2½		
X87	20.00	3–3–3–3		

‡The size of the cover or wiring device is the same as size of hubs at ends of cover opening.

CROUSE-HINDS CONDULETS

OBROUND SERIES CONDULETS

Threadless



For EMT (Thin Wall)

Illustrations shown above listings are for Rigid Conduit (Thick Wall).

Type A



Type B*



Thick Wall Cat. No.	Thin Wall Cat. No.	List, Each	Size In.	Thick Wall Cat. No.	Thin Wall Cat. No.	List, Each
A197	A17-MT	$0.70	½	B197	B17-MT	$0.70
A297	A27-MT	.90	¾	B297	B27-MT	.90
A397	A37-MT	1.20	1	B397	B37-MT	1.20
A497	A47-MT	2.20	1¼	B497	B47-MT	2.96
A597	A57-MT	3.00	1½	B597	B57-MT	3.68
A697	A67-MT	5.50	2	B697	B67-MT	6.40
A797	.....	11.00	2½	B797	.....	18.30
A897	.....	13.00	3	B897	.....	20.60
A997	.....	20.00	3½	B997	.....	34.00
A1097	.....	24.00	4	B1097	.....	38.50

Type C



Type E

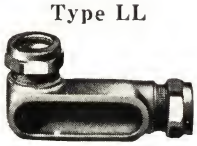


C197	C17-MT	$1.00	½	E197	E17-MT	$0.70
C297	C27-MT	1.20	¾	E297	E27-MT	.90
C397	C37-MT	1.80	1	E397	E37-MT	1.20
C497	C47-MT	3.00	1¼	E497	E47-MT	2.20
C597	C57-MT	4.20	1½	E597	E57-MT	3.00
C697	C67-MT	7.00	2	E697	E67-MT	5.50
C797	.....	14.00	2½	E797	.....	11.00
C897	.....	18.00	3	E897	.....	13.00
C997	.....	28.00	3½	E997	.....	20.00
C1097	.....	33.00	4	E1097	.....	24.00

Type LB



Type LL



LB197	LB17-MT	$1.00	½	LL197	LL17-MT	$1.00
LB297	LB27-MT	1.20	¾	LL297	LL27-MT	1.20
LB397	LB37-MT	1.80	1	LL397	LL37-MT	1.80
LB497	LB47-MT	3.00	1¼	LL497	LL47-MT	3.00
LB597	LB57-MT	4.20	1½	LL597	LL57-MT	4.20
LB697	LB67-MT	7.00	2	LL697	LL67-MT	7.00
LB797	.....	14.00	2½	LL797	.....	14.00
LB897	.....	18.00	3	LL897	.....	18.00
LB997	.....	28.00	3½	LL997	.....	28.00
LB1097	.....	33.00	4	LL1097	.....	33.00

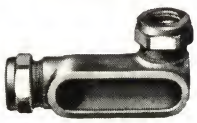
*One-piece body, ½ to 1 inch; two-piece body, 1¼ to 4 inch.

CROUSE-HINDS CONDULETS

OBROUND SERIES CONDULETS

Threadless

Type LR



Type T

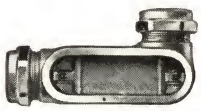


Thick Wall Cat. No.	Thin Wall Cat. No.	List, Each	Size In.	Thick Wall Cat. No.	Thin Wall Cat. No.	List, Each
LR197	LR17-MT	$1.00	½	T197	T17-MT	$1.30
.....	.....	.....	¾†	.....	T127-MT	1.52
LR297	LR27-MT	1.20	¾	T297	T27-MT	1.60
LR397	LR37-MT	1.80	1	T397	T37-MT	2.20
LR497	LR47-MT	3.00	1¼	T497	T47-MT	3.80
LR597	LR57-MT	4.20	1½	T597	T57-MT	5.40
LR697	LR67-MT	7.00	2	T697	T67-MT	8.60
LR797	.....	14.00	2½	T797	.....	16.00
LR897	.....	18.00	3	T897	.....	22.00
LR997	.....	28.00	3½	T997	.....	32.00
LR1097	.....	33.00	4	T10097	.....	38.00

Type X



Type L††



X197	X17-MT	$1.60	½	L197	L17-MT	$1.00
X297	X27-MT	2.20	¾	L297	L27-MT	1.20
X397	X37-MT	3.00	1	L397	L37-MT	1.80
X497	X47-MT	4.60	1¼	L497	L47-MT	3.00
X597	X57-MT	6.20	1½	L597	L57-MT	4.20
X697	X67-MT	11.00	2	L697	L67-MT	7.00

GASKETS

Solid Type



For use with blank sheet steel and cast Feraloy covers.

Size In.	Catalog Numbers—Rubber	Cork	Vellumoid	List, Each
½	Gask 571	Gask 671	Gask 771	$0.20
¾	Gask 572	Gask 672	Gask 772	.20
1	Gask 573	Gask 673	Gask 773	.30
1¼	Gask 574	Gask 674	Gask 774	.40
1½	Gask 575	Gask 675	Gask 775	.40
2	Gask 576	Gask 676	Gask 776	.50
2½ or 3	Gask 578	Gask 678	Gask 778	.80
3½ or 4	Gask 579	Gask 679	Gask 779	1.00

Open Type



For use with blank composition covers, wire-hole covers, and wiring devices.

½	Gask 471	Gask 371	$0.20
¾	Gask 472	Gask 372	.20
1	Gask 473	Gask 373	.30
1¼	Gask 474	Gask 374	.40
1½	Gask 475	Gask 375	.40
2	Gask 476	Gask 376	.50
2½ or 3	Gask 478	Gask 378	.80
3½ or 4	Gask 479	Gask 379	1.00

†Size of hubs for T127-MT: ½, ¾, ½.

††Type L Condulets have two openings, with one blank sheet steel cover. Can be used for either an LL or an LR.

CROUSE-HINDS CONDULETS

COVERS FOR OBROUND SERIES CONDULETS

Blank Covers

Special drilling at additional charge: Up to 1″ diam., **$0.30** per hole; 1″ and larger, **$0.50** per hole.



Size	Sheet Steel Cat. No.	Sheet Steel List, Each	Cast Feraloy Cat. No.	Cast Feraloy List, Each	Composition Cat. No.	Composition List, Each
½	170	$0.11	170f	$0.32	1770	$0.20
¾	270	.15	270f	.44	2770	.30
1	370	.34	370f	.70	3770	.50
1¼	470	.48	470f	1.00	4770	1.00
1½	570	.48	570f	1.00	5770	1.00
2	670	.84	670f	1.40	6770	1.20
2½ or 3	870	1.12	870f	1.50	8770	3.20
3½ or 4	970	1.20	970f	1.60	9770	5.00
4½, 5 or 6	.....	.....	.....	.....	14770	8.00

Knockout Covers*

Composition



1, 2 or 3-Wire

Size	Dia. Knockouts	Cat. No.	List, Each
½	1—7/16 2—5/8	1773	$0.20
¾	3—7/16	2773	.30
1	3—½	3773	.50



2, 3, 4 or 5-Wire

1¼	5—9/16	4775	$0.72
1½	5—11/16	5775	.72
2	2—11/16 3—⅞	6775	1.20

Wire Hole Covers*

Porcelain and Composition



1-Wire†

1-Wire Special†

Size	Dia. Holes	Porcelain Cat. No.	Porcelain List, Each	Composition Cat. No.	Composition List, Each
½	5/8	.....	.....	1771S	$0.20
¾	25/32	.....	.....	2771S	.30
1	1	.....	.....	3771S	.50
1¼	1⅛	.....	.....	4771S	1.00

1-Wire Standard†

1½	1⅜	571	$0.72	5771	$1.00
2	1¾	.....	.....	6771	1.20
2½ or 3	2 5/16	871	1.60	8771	3.20
3½ or 4	3¼	971	1.80	9771	5.00
4½, 5 or 6	3¼	.....	.....	14771	8.00

*For special drilling use blank composition covers.

†Use knockout covers for sizes not shown.

CROUSE-HINDS CONDULETS

COVERS FOR OBROUND SERIES CONDULETS

Wire Hole Covers*

Porcelain and Composition



2-Wire†

Size	Dia. Holes	Porcelain Cat. No.	Porcelain List, Each	Composition Cat. No.	Composition List, Each
2½ or 3	1 7/16	872	$1.60	8772	$3.20
3½ or 4	1 15/16	972	1.80	9772	5.00
4½, 5 or 6	2¼	.....	.....	14772	8.00



3-Wire†

2½ or 3	1 7/16	873	$1.60	8773	$3.20
3½ or 4	1 15/16	973	1.80	9773	5.00
4½, 5 or 6	2¼	.....	.....	14773	8.00



4-Wire†

½	5/16	.....	.....	1774	$0.20
¾	5/16	.....	.....	2774	.30
1	13/32	.....	.....	3774	.50
2½ or 3	1 7/16	874	$1.60	8774	3.20
3½ or 4	1 15/16	974	1.80	9774	5.00
4½, 5 or 6	1⅞	.....	.....	14774	8.00



5-Wire†

¾	5/16	.....	.....	2775	$0.30
1	13/32	.....	.....	3775	.50
2½ or 3	1 7/16	875	$1.60	8775	3.20
3½ or 4	1½	.....	.....	9775	5.00
4½, 5 or 6	1 9/16	.....	.....	14775	8.00



6-Wire

¾	5/16	.....	.....	2776	$0.30
1	⅜	.....	.....	3776	.50
1¼	½	476	$0.72	4776	1.00
1½	17/32	576	.72	5776	1.00
2	5/8	.....	.....	6776	1.20
2½ or 3	⅞	.....	.....	8776	3.20
3½ or 4	1 1/16	.....	.....	9776	5.00
4½, 5 or 6	1 1/16	.....	.....	14776	8.00

*For special drilling use blank composition covers.

†Use knockout covers for sizes not shown.

Sheet Steel Covers with Cord Clamps

Provided with cord clamp and bushed hole which safeguards the drop cord. Takes cord ¼ to ⅜-inch diameter.



Size In.	Cat. No.	List Each
½	1972	$0.60
¾	2972	.70

CROUSE-HINDS CONDULETS

WIRING DEVICES FOR OBROUND SERIES CONDULETS

2-Pole Attachment Plug Receptacles

15 Amp., 125V. or 10 Amp., 250V.

Single, with Double T Slots



Composition

Size In.	Composition Cat. No.	Composition List, Each	Porcelain Cat. No.	Porcelain List, Each
½	1715	$1.20	1705	$1.20
¾	2715	1.40	2705	1.40
1	3715	1.80	3705	1.80

Duplex, with Parallel Slots



Composition

½	1748	$1.20	.....	.....
¾	2748	1.40	.....	.....
1	3748	1.80	.....	.....

Duplex, with Double T Slots



Composition

½	1725	$1.80	.....	.....
¾	2725	2.00	.....	.....
1	3725	2.50	.....	.....

2-Pole Polarity Plug Receptacles

15 Amp., 125V. or 10 Amp., 250V.



Composition

½	*1728	$1.20	*1708	$1.20
¾	*2728	1.40	*2708	1.40
1	*3728	1.80	*3708	1.80

20 Ampere, 250 Volts

½	1738	$1.30	1718	$1.40
¾	2738	1.50	2718	1.60
1	3738	1.90	3718	2.00

Attachment Plug Receptacles

2-Wire, 3-Pole

Parallel Slots

15 A., 125 V.



Composition

½	1784	$2.65	.....	.....
¾	2784	2.85	.....	.....
1	3784	3.25	.....	.....

Tandem Slots

15 A., 250 V.

½	1788	.....	.....	.....
¾	2788	.....	.....	.....
1	3788	.....	.....	.....

3-Wire, 3-Pole

15 Amp., 125V. or 10 Amp., 250V.



Porcelain 3-Wire

½	.....	.....	1709	$1.50
¾	.....	.....	2709	1.60

20 Amperes, 250 Volts

½	.....	.....	1719	$1.80
¾	.....	.....	2719	2.00

2-Wire, 3-Pole

Extra Pole Grounded

15 Amp., 125V. or 10 Amp., 250V.

½	.....	.....	1729	$1.70
¾	.....	.....	2729	1.80

20 Amperes, 250 Volts

½	.....	.....	1739	$2.00
¾	.....	.....	2739	2.20

Lamp Receptacles

660 Watts, 600 Volts

With Shade Holder Groove

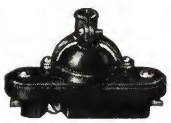


Composition, With Groove

½	1726	$0.90	1706	$0.90
¾	2726	1.00	2706	1.00
1	3726	1.40	3706	1.40

Cord Rosettes

660 Watts, 250 Volts



Composition

½	1720	$1.90	1700	$1.20
¾	2720	2.10	2700	1.40
1	3720	2.50	3799	1.80

*Takes Hubbell No. 5567 polarized plug.

Prices for receptacles listed above do not include attachment plugs.

If specified on the order, lamp receptacle with lamp grip will be furnished at an advance in price of 20 cents.

CROUSE-HINDS CONDULETS

CAST ALUMINUM COVERS

Take P&S-Despard, Bryant, Hubbell, Arrow-H&H and GE Interchangeable wiring devices. Mounting bridge furnished.





Size In.	Without Guard Cat. No.	List, Each
½	1755	$0.60
¾	2755	.80

With Guard

For Switches Only

½	1785	$0.70

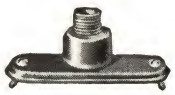
VAPORTIGHT SWITCH COVERS

With gasket and mounting strap for switches. Take P&S-Despard, Bryant, Hubbell, Arrow-H&H, and GE Interchangeable switches.



½	1766	$2.80
¾	2766	3.00
1	3766	3.20

CAST FERALOY COVERS WITH NIPPLES



Male



Female

Size Nipple	Size Cover	Male Cat. No.	Male List, Each	Female Cat. No.	Female List, Each
⅜	½	1723	$0.50	1733	$0.50
	¾	2723	.60	2733	.60
	1	3723	.80	3733	.80
½	½	1724	.60	1734	.60
	¾	2724	.70	2734	.70
	1	3724	.90	3734	.90
	1¼	4724	1.12	4734	1.12
	1½	5724	1.12	5734	1.12

Adapters for Obround Series Condulets



Size In.	For Adapting Condulets Cat. No.	List, Each
1	731	$0.70
1¼	741	1.00
1½	751	1.40
2	761	1.80

TYPE LBD CONDULETS

For use when it is necessary to make a 90° bend in the conduit system. Arrangement of cover opening allows conductors to be pulled straight through either hub. Furnished with blank cast Feraloy cover.





Size In.	Cat. No.	List, Each
½	LBD1100	$1.30
¾	LBD2200	1.60
1	LBD3300	2.40
1¼	LBD4400	6.50
1½	LBD5500	11.50
2	LBD6600	12.50
2½	LBD7700	23.50
3	LBD8800	28.50
3½	LBD9900	46.50
4	LBD10900	52.00
4½	LBD011	70.00
5	LBD012	80.00
6	LBD014	150.00

Gaskets for LBD Condulets

Size In.	Cat. No. Gask-	List, Each	Size In.	Cat. No. Gask-	List, Each
½	680R	$0.20	2½ or 3	685R	$3.00
¾	681R	.30	3½ or 4	686R	3.50
1	682R	.40	4½ or 5	687R	7.00
1¼	683R	.60	6	688R	10.00
1½ or 2	684R	1.20	.....	.....	.....

CROUSE-HINDS CONDULETS

FORM 8 SERIES CONDULETS

Threaded for Thick Wall Conduit



Relative Sizes of 2-Inch Type C, Obround and Form 8 Condulets

Form 8 series Condulets are for use where sizes of conductors, number of splices or tapping and pulling requirements necessitate more room than provided in the Obround series.

Type C



Size In.	Cat. No.	List Each
½	Use	
¾	Obround	
1	Condulets	
1¼	C48	$2.10
1½	C58	2.80
2	C68	4.80
2½	C78	10.00
3	C88	13.00
3½	C98	21.00
4	C108	24.00

Type LR



Size In.	Cat. No.	List Each
½	Use	
¾	Obround	
1	Condulets	
1¼	LR48	$2.10
1½	LR58	2.80
2	LR68	4.80
2½	LR78	10.00
3	LR888	13.00
3½	LR98	21.00
4	LR108	24.00

Type E



Size In.	Cat. No.	List Each
½	Use	
¾	Obround	
1	Condulets	
1¼	E48	$1.60
1½	E58	2.08
2	E68	4.28
2½	E78	8.40
3	E88	10.00
3½	E98	14.00
4	E108	18.00

Type T



Size In.	Cat. No.	List Each
½	Use	
¾	Obround	
1	Condulets	
1¼	T48	$2.44
1½	T58	3.38
2	T68	5.10
2½	T78	10.00
3	T88	15.00
3½	T98	22.00
4	T108	26.00

Type LB



Size In.	Cat. No.	List Each
½	Use	
¾	Obround	
1	Condulets	
1¼	LB48	$2.10
1½	LB58	2.80
2	LB68	4.80
2½	LB78	10.00
3	LB888	13.00
3½	LB98	21.00
4	LB108	24.00

Type TB



Size In.	Cat. No.	List Each
½	Use	
¾	Obround	
1	Condulets	
1¼	TB48	$2.44
1½	TB58	3.38
2	TB68	5.10
2½	TB78	10.00
3	TB88	15.00
3½	TB98	22.00
4	TB108	26.00

CROUSE-HINDS CONDULETS

FORM 8 SERIES CONDULETS

Threaded for Thick Wall Conduit

Type LL



Size In.	Cat. No.	List Each
½	Use	
¾	Obround	
1	Condulets	
1¼	LL48	$2.10
1½	LL58	2.80
2	LL68	4.80
2½	LL78	10.00
3	LL888	13.00
3½	LL98	21.00
4	LL108	24.00

Type X



Size In.	Cat. No.	List Each
½	Use	
¾	Obround	
1	Condulets	
1¼	X48	$2.80
1½	X58	3.56
2	X68	7.00
2½	X78	12.00
3	X88	20.00
3½	X98	26.00
4	X108	32.00

COVERS FOR FORM 8 SERIES CONDULETS

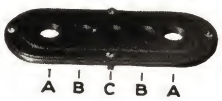
Blank



Size In.	Cat. No.	List Each
	Sheet Steel	
1¼ or 1½	580	$0.64
2	680	1.12
2½ or 3	880	1.50
3½ or 4	980	1.60
	Cast Feraloy	
1¼ or 1½	580F	$1.00
2	680F	1.40
2½ or 3	880F	1.50
3½ or 4	980F	1.60
	Bakelite	
1¼ or 1½	5870	$2.00
2	6870	2.40
2½ or 3	8870	3.20
3½ or 4	9870	5.00

If specified on order, blank bakelite cover will be furnished with special drilling at an advance in list price as follows: Up to 1 inch diameter, **30** cents list per hole; 1 inch and over, **50** cents list per hole.

2, 3, 4, or 5-Wire
Bakelite



Size In.	Diameter, Inches—Holes A	Knockouts B	Knockouts C	Cat. No.	List Each
1¼ or 1½	13/16	5/8	13/16	5875	$2.00
2	1	1	1	6875	2.40
2½ or 3	1 7/16	1 3/16	1 7/16	8875	3.20
3½ or 4	1 13/16	1 9/16	1 13/16	9875	5.00

GASKETS FOR FORM 8 SERIES



For use between Condulets and metal covers.

Size In.	No. Rubber	No. Cork	No. Vellumoid	List Each
1¼ or 1½	Gask 805R	Gask 805C	Gask 805V	$0.40
2	Gask 806R	Gask 806C	Gask 806V	.50
2½ or 3	Gask 808R	Gask 808C	Gask 808V	.80
3½ or 4	Gask 809R	Gask 809C	Gask 809V	1.00

CROUSE-HINDS CONDULETS

MOGUL SERIES CONDULETS

Type BC



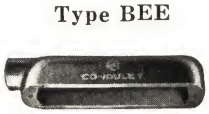
Size In.	Cat. No.	List Each
1	BC3	$3.80
1¼	BC4	4.30
1½	BC5	8.30
2	BC6	10.00
2½	BC7	15.20
3	BC8	20.40
3½	BC9	32.70
4	BC10	40.00

Type BT



Size In.	Cat. No.	List Each
1	BT3	$4.50
1¼	BT4	5.00
1½	BT5	9.30
2	BT6	11.20
2½	BT7	15.60
3	BT8	22.40
3½	BT9	33.70
4	BT10	42.00

Type BEE



1	BEE3	$3.40
1¼	BEE4	3.80
1½	BEE5	7.40
2	BEE6	9.00
2½	BEE7	13.60
3	BEE8	17.40
3½	BEE9	28.00
4	BEE10	34.00

Type BTB



1	BTB3	$4.50
1¼	BTB4	5.00
1½	BTB5	9.30
2	BTB6	11.20
2½	BTB7	15.60
3	BTB8	22.40
3½	BTB9	33.70
4	BTB10	42.00

Type BLB



1	BLB3	$3.80
1¼	BLB4	4.30
1½	BLB5	8.30
2	BLB6	10.00
2½	BLB7	15.20
3	BLB8	20.40
3½	BLB9	32.70
4	BLB10	40.00

Type BX



1	BX3	$5.00
1¼	BX4	5.50
1½	BX5	10.30
2	BX6	12.50
2½	BX7	19.00
3	BX8	25.00
3½	BX9	42.00
4	BX10	52.00

Type BUB



1	BUB3	$3.80
1¼	BUB4	4.30
1½	BUB5	$8.30
2	BUB6	10.00
2½	BUB7	15.20
3	BUB8	20.40
3½	BUB9	32.70
4	BUB10	40.00

COVERS FOR MOGUL SERIES CONDULETS

Blank



Bakelite



Cast Feraloy

Size In.	Bakelite No.	Bakelite Each	Cast Feraloy Without Gasket No.	Cast Feraloy Without Gasket Each	Cast Feraloy With Gasket No.	Cast Feraloy With Gasket Each
1 or 1¼	CF534	$3.20	BG47	$2.20	BG48	$3.00
1½ or 2	CF536	6.00	BG67	3.50	BG68	4.80
2½ or 3	CF538	8.00	BG87	7.50	BG88	12.50
3½ or 4	CF539	12.00	BG97	13.50	BG98	17.50

GASKETS FOR MOGUL SERIES CONDULETS

For use between Condulets and covers; except No. BG48, BG68, BG88 and BG98 covers, which have round gaskets.



Size In.	Cat. No.	List Each
1 or 1¼	Gask 271	$0.50
1½ or 2	Gask 272	.70
2½ or 3	Gask 273	1.50
3½ or 4	Gask 274	2.00

CROUSE-HINDS CONDULETS

FS AND FD SERIES CONDULETS

Take covers and accessories, or plug receptacle housings.

Overall dimensions, exclusive of hubs: FS—Length, $4\frac{5}{16}$"; width, $2\frac{3}{4}$"; depth, $1\frac{7}{8}$". FD—Length, $4\frac{5}{16}$"; width, $2\frac{3}{4}$"; depth, $2\frac{11}{16}$".

FS Condulets can be furnished with flat face ($4\frac{1}{2}$x$2\frac{13}{16}$x$2\frac{1}{16}$ inches) to take standard wall plates at the same list prices; add suffix S24 to catalog number.

FS Series take devices $1\frac{5}{8}$" deep or less.

FD Series take devices $2\frac{3}{8}$" deep or less.

Threaded for Rigid Conduit (Thick Wall)

Type FS or FD



Type FSA or FDA



Cat. No.	List Each	Size	Cat. No.	List Each
FS1	$1.30	½	FSA1	$1.30
FS2	1.50	¾	FSA2	1.50
FS3	1.70	1	FSA3	1.70
FD1	1.50	½	FDA1	1.50
FD2	1.70	¾	FDA2	1.70
FD3	2.00	1	FDA3	2.00

Type FSC or FDC



Type FSL or FDL



FSC1	$1.50	½	FSL1	$1.50
FSC2	1.80	¾	FSL2	1.80
FSC3	2.20	1	FSL3	2.20
FDC1	1.70	½	FDL1	1.70
FDC2	2.10	¾	FDL2	2.10
FDC3	2.50	1	FDL3	2.50

Type FSR or FDR



Type FSS or FDD



FSR1	$1.50	½	FSS1	$1.50
FSR2	1.80	¾	FSS2	1.80
FSR3	2.20	1	FSS3	2.20
FDR1	1.70	½	FDD1	1.70
FDR2	2.10	¾	FDD2	2.10
FDR3	2.50	1	FDD3	2.50

Type FSCA or FDCA



Type FSCC or FDCC



FSCA1	$2.00	½	FSCC1	$2.00
FSCA2	2.50	¾★	FSCC21	2.50
FSCA3	2.90	1★	FSCC31	2.90
FDCA1	2.20	½	FDCC1	2.20
FDCA2	2.70	¾★	FDCC21	2.70
FDCA3	3.10	1★	FDCC31	3.10

★The hubs at the right in the illustration are ½ inch on types FSCC and FDCC.

CROUSE-HINDS CONDULETS

FS AND FD SERIES CONDULETS

FS Series take devices 1⅝" deep or less.

FD Series take devices 2⅜" deep or less.

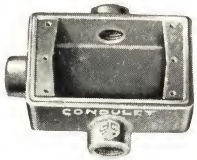
Threaded for Rigid Conduit (Thick Wall)

Type FSCT or FDCT



Cat. No.	List Each	Size
FSCT1	$2.00	½
FSCT2	2.50	¾
FSCT3	2.90	1
FDCT1	2.20	½
FDCT2	2.70	¾
FDCT3	3.10	1

Type FST or FDT



Cat. No.	List Each
FST1	$2.00
FST2	2.50
FST3	2.90
FDT1	2.20
FDT2	2.70
FDT3	3.10

Type FSX or FDX



½	FSX1	$2.40
¾	FSX2	3.00
1	FSX3	3.40
½	FDX1	2.60
¾	FDX2	3.20
1	FDX3	3.60

Type FS Double Face



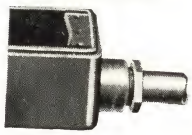
FS152	$2.30	½
FS252	2.50	¾

Type FSC Double Face



FSC152	$2.50
FSC252	2.90

Threadless



For EMT (Thin Wall)

Illustrations shown above listings are for Rigid Conduit (Thick Wall).

Type FS or FD



Thick Wall Cat. No.	Thin Wall Cat. No.	List Each	Size
FS191	FS1-MT	$1.40	½
FS291	FS2-MT	1.70	¾
FS391	FS3-MT	2.00	1
FD191	FD1-MT	1.60	½
FD291	FD2-MT	1.90	¾
FD391	FD3-MT	2.30	1

Type FSC or FDC



Thick Wall Cat. No.	Thin Wall Cat. No.	List Each
FSC191	FSC1-MT	$1.70
FSC291	FSC2-MT	2.20
FSC391	FSC3-MT	2.80
FDC191	FDC1-MT	1.90
FDC291	FDC2-MT	2.50
FDC391	FDC3-MT	3.10

CROUSE-HINDS CONDULETS

FS AND FD SERIES CONDULETS

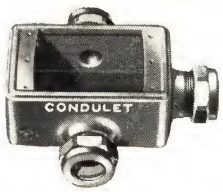
Threadless

Type FSCT or FDCT



Thick Wall Cat. No.	Thin Wall Cat. No.	List Each	Size
FSCT191	FSCT1-MT	$2.30	½
FSCT291	FSCT2-MT	3.10	¾
FSCT391	FSCT3-MT	3.80	1
FDCT191	FDCT1-MT	2.50	½
FDCT291	FDCT2-MT	3.30	¾
FDCT391	FDCT3-MT	4.00	1

Type FST or FDT



Thick Wall Cat. No.	Thin Wall Cat. No.	List Each
FST191	FST1-MT	$2.30
FST291	FST2-MT	3.10
FST391	FST3-MT	3.80
FDT191	FDT1-MT	2.50
FDT291	FDT2-MT	3.30
FDT391	FDT3-MT	4.00

Type FSX or FDX



½	FSX191	FSX1-MT	$2.80
¾	FSX291	FSX2-MT	3.80
1	FSX391	FSX3-MT	4.60
½	FDX191	FDX1-MT	3.00
¾	FDX291	FDX2-MT	4.00
1	FDX391	FDX3-MT	4.80

TYPE ExF EXTENSIONS

For FS and FD Series Condulets, Single-Gang



ExF11



ExF41

Depth of Extension	Cat. No.	List Each
1	ExF11	$1.00
2½	ExF21	3.50
4⅞	ExF41	4.00

CONDULET COVERS

For Condulets of the FS and FD Series, Single-Gang, and FS Series 2-Gang Tandem and Type ExF Extensions

For Double Push Button, Double Push Button Momentary Contact, and Double Push Lock Switches



Sheet Steel

Cat. No.	List Each	Style
DS8	$0.30	Surface
DSS8	.30	Flush



Cast Feraloy—Guarded

DS8g	$0.70	Surface
DS8g	.70	Flush

For G-E, Arrow-H&H, Bryant, and Hubbell Tumbler Flush Switches with Square Handles



Sheet Steel

DS32	$0.30	Surface
DSS32	.30	Flush



Cast Feraloy—Guarded

DS32g	$0.70	Surface
DS32g	.70	Flush

CROUSE-HINDS CONDULETS

CONDULET COVERS

For Condulets of the FS and FD Series, Single-Gang and FS Series 2-Gang Tandem; and Type ExF Extensions

For Round Flush Receptacles



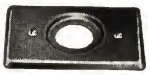
Sheet Steel——Spring Hinge Lid
Diameter Opening, 1⅝ Inches

Cat. No.	List Each	Style
DS10	$1.20	Surface
DSS10	1.20	Flush



Cast Feraloy—With Spring Door with Gaskets
Diameter Opening, 1⅞ Inches

DS10g	$2.50	Surface
DS10g	2.50	Flush



Sheet Steel
Diameter Opening, 1$\frac{13}{32}$ Inches

DS21	$0.30	Surface
DSS21	.30	Flush

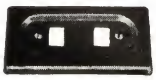
For Standard Duplex Flush Receptacles



Sheet Steel

DS23	$0.30	Surface
DSS23	.30	Flush

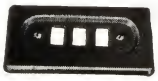
For Dugle Tumbler Switches



Sheet Steel

DS63	$0.30	Surface
DSS63	.30	Flush

For Trigle Tumbler Switches



Sheet Steel

DS65	$0.30	Surface
DSS65	.30	Flush

For Despard, Bryant, Hubbell, Arrow-H. & H., and G-E Wiring Devices



Furnished with Mounting Bridge
With 1 Opening—Sheet Steel

DS71	$0.50	Surface
DSS71	.50	Flush



With 2 Openings—Sheet Steel

DS72	$0.50	Surface
DSS72	.50	Flush

With 3 Openings—Sheet Steel

DS73	$0.50	Surface
DSS73	.50	Flush

For G-E, 30-Ampere Flush Plug Receptacles
Diameter Cover Opening, 1⅝ Inches



Sheet Steel

DS35	$0.30	Surface
DSS35	.30	Flush

With Female Brass Nipple



Sheet Steel—⅜-Inch Nipple

DS18	$0.80	Surface

Sheet Steel—½-Inch Nipple

DS116	$0.90	Surface

Blank Covers



Sheet Steel

DS100	$0.20	Surface
DSS100	.20	Flush



Cast Feraloy—With Gasket

DS100g	$0.50	Surface
DS100g	.50	Flush

CROUSE-HINDS CONDULETS

CONDULET COVERS

For Condulets of the FS and FD Series, Single-Gang and FS Series 2-Gang Tandem; and Type ExF Extensions
For Pilot Lamp Flush Receptacles



Sheet Steel



Cast Feraloy

Jewel	Sheet Steel Surface No.	Each	Sheet Steel Flush No.	Each	Cast Feraloy Surface or Flush Vaportight No.	Each
Red	DS24	$2.00	DSS24	$2.00	DS24g	$2.50
Green	DS41	2.00	DSS41	2.00	DS41g	2.50
Amber	DS44	2.00	DSS44	2.00	DS44g	2.50
Opal	DS47	2.00	DSS47	2.00	DS47g	2.50
Clear	DS48	2.00	DSS48	2.00	DS48g	2.50
Blue	DS49	2.00	DSS49	2.00	DS49g	2.50

VAPORTIGHT AND WEATHERPROOF COVERS
With Switch Operating Mechanism

Surface or flush. Furnished with gasket.

For External Operation of Double Push Button Switches



Cat. No.	List Each	Material
	Furnished with Handle	
DS108	$3.50	Cast Feraloy

For Momentary Contact Switches



Cat. No.	List Each	Material
	Furnished with Handle	
DS107	$3.50	Cast Feraloy

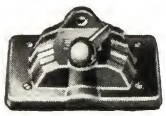
For External Operation of Tumbler Switches



Cat. No.	List Each	Material
	For Standard Operation "On" or "Off"	
DS128	$3.50	Cast Feraloy



	For Momentary Contact Operation, Normally On	
DS126	3.50	Cast Feraloy
	Normally Off	
DS127	3.50	Cast Feraloy



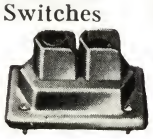
	For Standard Operation, On or Off	
DS181	$3.50	Cast Feraloy
	For Momentary Contact Switches	
DS183	$3.50	Cast Feraloy
	For Standard Operation "On" or "Off"	
DS185	$3.50	Cast Feraloy

For Standard Operation "On" or "Off"



Furnished with Switch Mounting Bridge.

Switch Arrangement	Material	No.	Each
1 Switch	Cast Feraloy	DS101	$3.50
2 Switches	Cast Feraloy	DS102	5.00
3 Switches	Cast Feraloy	DS103	6.50



Furnished with Buttons for Operating Motor Control Push Button and "Standard" Push Button Switches.

For Motor Control Push Button Switches

Description	Switch Markings	Cat. No.	List Each
1 Button (Norm. Open)	Start	DS171F	$3.50
1 Button (Norm. Closed)	Stop	DS171G	3.50
2 Buttons (1 Norm. Open, 1 Norm. Closed)	Start, Stop	DS171	3.50
For "Standard" Flush Push Button Switches			
2 Buttons (On and Off)	On, Off	DS171C	$3.50

CROUSE-HINDS CONDULETS

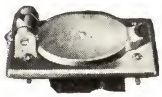
TYPE DS PLUG RECEPTACLE HOUSINGS WITH RECEPTACLE

For Condulets of the FS and FD Series, Single-Gang and FS Series 2-Gang Tandem; and Type ExF Extensions

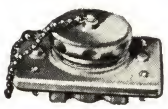
Take Standard Attachment Plugs



Plain Housing With Receptacle



Spring Door Housing With Receptacle



Threaded Cap Housing With Receptacle

15 Amperes, 125 Volts; 10 Amperes, 250 Volts
Hole in Cover, 1 7/16" Dia.

Receptacle Poles	Plain Cat. No.	Plain List, Each	With Spring Door Cat. No.	With Spring Door List, Each	With Threaded Cap‡ Cat. No.	With Threaded Cap‡ List, Each
Double T						
2-W., 2-P.	DS325	$2.00	DS332	$3.50	DS339	$4.00
Polarized						
2-W., 2-P.	DS326*	2.80	DS333*	4.30	DS340*	4.80
2-W., 3-P.*	DS327	3.50	DS334	5.00	DS341	5.50
3-W., 3-P.	DS328	4.00	DS335	5.50	DS342	6.00
Twistlock						
2-W., 2-P.	DS329	2.60	DS336	4.10	DS343	4.60
2-W., 3-P.*	DS330	3.80	DS337	5.30	DS344	5.80
3-W., 3-P.	DS331	4.30	DS338	5.80	DS345	6.30

20 Amperes, 125 or 250 Volts
Hole in Cover, 1 7/16" Dia.

Polarized						
2-W., 2-P.	DS346*	3.60	DS354*	5.10	DS362*	5.60
2-W., 3-P.*	DS347	4.20	DS355	5.70	DS135	8.00
3-W., 3-P.	DS348	4.20	DS356	5.70	DS139	8.00
3-W., 4-P.*	DS349	5.00	DS357	6.50	.....	.....
4-W., 4-P.	DS350	5.00	DS358	6.50	.....	.....
Twistlock						
2-W., 2-P.	DS351	2.90	DS359	4.40	DS365	4.90

20 Amperes, 125 or 250 Volts; 10 Amperes, 575 Volts A.C.
Hole in Cover, 1 7/16" Dia.

Twistlock						
2-W., 3-P.*	DS352	4.60	DS360	6.10	DS138†	8.00
3-W., 3-P.	DS353	4.60	DS361	6.10	DS137†	8.00

20 Amperes, 125 or 250 Volts; 10 Amperes, 575 Volts A.C.
Hole in Cover, 1 5/8" Dia.

Twistlock						
3-W., 4-P.*	DS366	5.80	DS368	7.30	.....	.....
4-W., 4-P.	DS367	5.80	DS369	7.30	.....	.....

*Extra pole grounded.

†For use only with Hubbell No. 9965 rubber plug.

‡Cannot be used with WP plugs.

*Takes Hubbell #6918 or similar plugs with right angle blades.

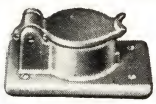
CROUSE-HINDS CONDULETS

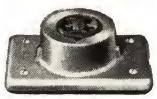
TYPE DS PLUG RECEPTACLE HOUSINGS

For Condulets of the FS and FD Series, Single-Gang and FS Series 2-Gang Tandem; and Type ExF Extensions

Take Standard Attachment Plugs
Threaded Housings take Type WP Plugs
Surface or Flush
15 Amperes, 125 Volts; 10 Amperes, 250 Volts

With Spring Door **Without Spring Door**





Cat. No.	List, Each		Cat. No.	List, Each
DS83	$6.40	2-Wire, 2-Pole	DS85	$3.20
DS84	7.80	2-Wire, 3-Pole*	DS86	4.60
DS91	7.80	3-Wire, 3-Pole	DS92	4.60

With Threaded Cap† **Without Threaded Cap**





DS81	$5.00	2-Wire, 2-Pole	DS87	$3.50
DS82	6.90	2-Wire, 3-Pole*	DS88	5.40
DS90	6.90	3-Wire, 3-Pole	DS93	5.40



TYPE WP WATERTIGHT PLUGS

For use with Type DS and Type GS Threaded Receptacle Housings. 15 Amperes, 125 Volts, or 10 Amperes, 250 Volts.

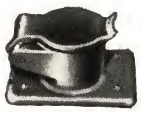
Style	Size Cord	Cat. No.	List, Each
2-Pole Tandem Blade	.375 to .500	WP721	$3.00
	.500 to .625	WP821	3.00
2-Pole Parallel Blade	.375 to .500	WP722	3.00
	.500 to .625	WP822	3.00
3-Pole	.375 to .500	WP731	3.50
	.500 to .625	WP831	3.50

TYPE FAR ARKTITE RECEPTACLE HOUSINGS

For Condulets of the FS and FD Series, Single-Gang and FS Series 2-Gang Tandem; and Type ExF Extensions

Take Type APJ Plugs
30 Amperes, 250 Volts D.C., 600 Volts A.C.

With Spring Door **Without Spring Door**



Style 1—Grounded Through Shell.
Style 2—Grounded Through Extra Pole and Shell.



No.	Each	Style		No.	Each
FAR321	$12.50	1	2-W., 2-P.	FAR323	$11.10
FAR331	13.50	1	3-W., 3-P.	FAR333	12.10
FAR341	15.10	1	4-W., 4-P.	FAR343	13.70
FAR351	17.50	1	5-W., 5-P.	FAR353	16.10
FAR332	15.50	2	2-W., 3-P.	FAR334	14.10
FAR342	17.10	2	3-W., 4-P.	FAR344	15.70
FAR352	20.60	2	4-W., 5-P.	FAR354	19.20

Without Threaded Cap **With Threaded Cap†**



Style 1—Grounded Through Shell.
Style 2—Grounded Through Extra Pole and Shell.



FAR325	$11.60	1	2-W., 2-P.	FAR327	$13.20
FAR335	12.60	1	3-W., 3-P.	FAR337	14.20
FAR345	14.20	1	4-W., 4-P.	FAR347	15.80
FAR355	16.60	1	5-W., 5-P.	FAR357	18.20
FAR336	14.60	2	2-W., 3-P.	FAR338	16.20
FAR346	16.20	2	3-W., 4-P.	FAR348	17.80
FAR356	19.50	2	4-W., 5-P.	FAR358	21.10

†Furnished with gaskets. *Extra pole grounded.

CROUSE-HINDS CONDULETS

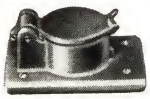
TYPE BRD PLUG RECEPTACLE HOUSINGS

For Condulets of the FS and FD Series, Single-Gang and FS Series 2-Gang Tandem; and Type ExF Extensions

***30 Amperes, 250 Volts A.C.**

Can be used on Condulets mounted either on the surface of or flush with the wall. Take Type BP plugs. Two-pole housings are furnished with 30-ampere, 250-volt receptacle BR302; 3-pole housings with 30-ampere, 250-volt receptacle BR303; 4-pole with 30-ampere, 250-volt receptacle BR304.

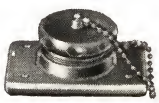
With Spring Door — **Without Spring Door**

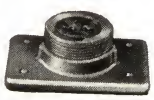




Cat. No.	List, Each		Cat. No.	List, Each
BRD6302	$8.40	2-Pole	BRD302	$5.20
BRD6303	9.80	3-Pole	BRD303	6.20
BRD6304	11.20	4-Pole	BRD304	7.20

With Threaded Cap — **Without Threaded Cap**





Furnished with gaskets.

Cat. No.	List, Each		Cat. No.	List, Each
BRD8302	$7.50	2-Pole	BRD7302	$5.60
BRD8303	9.40	3-Pole	BRD7303	6.70
BRD8304	11.30	4-Pole	BRD7304	7.80

*Can be used on 25-ampere, 125-volt D.C. circuits; or on 30-ampere, 250-volt D.C. circuits if circuit is broken before plug is withdrawn.

GASKETS FOR FS AND FD SERIES CONDULETS

For Use Between Condulets and Covers

(Not recommended as watertight)



No. of Gangs	No. Rubber	No. Vellumoid	List, Each
1	Gask 91	Gask 412	$0.40
2	Gask 145	Gask 343	.50
3	Gask 135	.....	.60
4	Gask 146	.....	.80

For Use Between Condulets and Vaportight Covers



1	Gask 425	.....	$0.40
2	Gask 434	.....	.50
3	Gask 460	.....	.60
4	Gask 461	.....	.80

For Use in Threaded Cap for Type BRD Plug Receptacle Housings



No. of Poles	Rubber No.	Each
2	Gask 173	$0.20
3	Gask 144	.20
4	Gask 144	.20

CROUSE-HINDS CONDULETS

FS AND FD SERIES 2-GANG CONDULETS

FS Series Condulets take Covers and Shallow Flush Rectangular Wiring Devices.

FD Series Condulets take Covers and Deep or Shallow Flush Rectangular Wiring Devices.

Overall dimensions, exclusive of hubs: FS—Length, 4 5/16"; width, 4 5/8"; depth, 1 7/8": FD—Length, 4 5/16"; width, 4 5/8"; depth, 2 1/8".

FS Condulets can be furnished with flat face (4 1/2x4 5/8x2 1/16 inches) to take standard wall plates at the same list prices; add Suffix S24 to catalog number.

FS Series take devices 1 5/8" deep or less.

FD Series take devices 2 3/8" deep or less.

Threaded for Rigid Conduit (Thick Wall)

Type FS or FD — **Type FSA or FDA**





Cat. No.	List, Each	Size	Cat. No.	List, Each
FS12	$2.40	1/2	FSA12	$2.40
FS22	2.60	3/4	FSA22	2.60
FS32	2.80	1	FSA32	2.80
FD12	2.80	1/2	FDA12	2.80
FD22	3.00	3/4	FDA22	3.00
FD32	3.20	1	FDA32	3.20

Type FSE or FDE — **Type FSC or FDC**





FSE12	$2.60	1/2	FSC12	$2.60
.....	.....	3/4	FSC222	2.80
.....	.....	1	FSC32	3.10
FDE12	3.00	1/2	FDC12	3.00
.....	.....	3/4	FDC222	3.20
.....	.....	1	FDC32	3.50

Type FSS or FDS — **Type FSD or FDB**





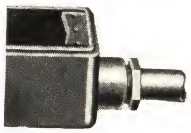
.....	.....	1/2	FSD12	$2.90
FSS222	$2.80	3/4*	FSD212	3.10
.....	.....	1*	FSD312	3.30
.....	.....	1/2	FDB12	3.30
FDS222	3.20	3/4*	FDB212	3.50
.....	.....	1*	FDB312	3.70

*The hubs at the top in the illustration are 1/2 inch on types FSD and FDB.

CROUSE-HINDS CONDULETS

FS AND FD SERIES 2-GANG CONDULETS

Threadless



For EMT (Thin Wall)

Illustrations shown above listings are for Rigid Conduit (Thick Wall).

Type FS or FD



Type FSC or FDC



Type FS or FD

Size	Thick Wall Cat. No.	Thin Wall Cat. No.	List, Each
½	FS192	FS12-MT	$2.50
¾	FS292	FS22-MT	2.80
1	FS392	FS32-MT	3.10
½	FD192	FD12-MT	2.90
¾	FD292	FD22-MT	3.20
1	FD392	FD32-MT	3.50

Type FSC or FDC

½	FSC192	FSC12-MT	$2.80
¾	FSC292	FSC222-MT	3.20
1	FSC392	FSC32-MT	3.70
½	FDC192	FDC12-MT	3.20
¾	FDC292	FDC222-MT	3.60
1	FDC392	FDC32-MT	4.10

FS SERIES CONDULETS, TWO-GANG TANDEM
Take Single-Gang Covers and Receptacle Housings Threaded for Rigid Conduit (Thick Wall)

Type FS, 2-Gang Tandem



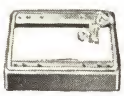
Type FSC, 2-Gang Tandem



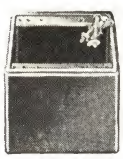
Cat. No.	List, Each
FS17	$3.30
FS27	3.50
FS37	3.70

Size	Cat. No.	List, Each
½	FSC17	$3.50
¾	FSC27	3.70
1	FSC37	3.90

Type ExF Two-Gang Extensions



ExF12



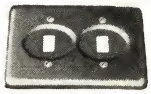
ExF42

Depth of Extension	Cat. No.	List, Each
1	ExF12	$2.10
4⅝	ExF42	5.70

CROUSE-HINDS CONDULETS

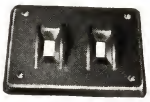
2-GANG CONDULET COVERS

For Condulets of the FS and FD Series, 2-Gang and Type ExF 2-Gang Extensions
For Tumbler Flush Switches with Square Handles



Sheet Steel

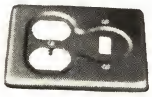
Cat. No.	List, Each	Style
S322	$0.60	Surface
SS322	.60	Flush



Cast Feraloy—Guarded

S322g	$1.30	Surface
S322g	1.30	Flush

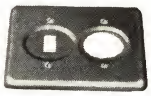
For "Standard" Duplex Flush Receptacles



Sheet Steel

S32232	$1.00	Surface
SS32232	1.00	Flush

For Round Plug Flush Receptacles



Sheet Steel

S32212	$1.00	Surface
SS32212	1.00	Flush

For Pilot Lamp Flush Receptacles
Furnished with red jewel.



Sheet Steel

S32242	$2.40	Surface
SS32242	2.40	Flush

For Round Flush Receptacles and Pilot Lamp Flush Receptacles



Sheet Steel—Furnished with Red Jewel

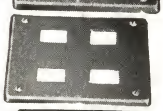
S21242	$2.50	Surface
SS21242	2.50	Flush

Take P&S-Despard, Bryant, Hubbell, Arrow-H. & H., and General Electric Interchangeable Wiring Devices—Sheet Steel
Furnished with mounting bridge.



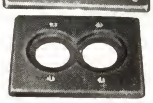
With 2 Openings

Cat. No.	List, Each	Style
S712	$1.00	Surface
SS712	1.00	Flush



With 4 Openings

S722	$1.00	Surface
SS722	1.00	Flush



With 6 Openings

S732	$1.00	Surface
SS732	1.00	Flush

For Round Flush Receptacles



Sheet Steel

S212	$0.60	Surface
SS212	.60	Flush

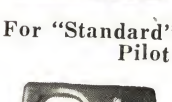
For "Standard" Duplex Flush Receptacles



Sheet Steel

S232	$0.60	Surface
SS232	.60	Flush

For Round Flush Receptacles and "Standard" Duplex Flush Receptacles



Sheet Steel

S21232	$1.00	Surface
SS21232	1.00	Flush

For "Standard" Duplex Flush Receptacles, and for Pilot Lamp Flush Receptacles



Furnished with red jewel.

Sheet Steel

S23242	$2.50	Surface
SS23242	2.50	Flush

Blank Metal Covers



Sheet Steel

S1002	$0.40	Surface
SS1002	.40	Flush

Cast Feraloy—With Gasket

S1002g	$1.00	Surface
S1002g	1.00	Flush

CROUSE-HINDS CONDULETS

2-GANG VAPORTIGHT AND WEATHERPROOF COVERS

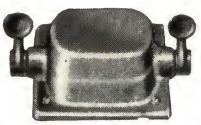
For Condulets of the FS and FD Series, 2-Gang and Type ExF 2-Gang Extensions With Switch Operating Mechanism

Surface or flush. Furnished with gasket.
For Standard Tumbler Switches



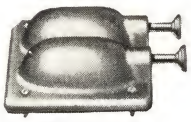
For Standard Operation, On or Off

Cat. No.	List Each	Material
DS1812	$6.00	Feraloy



For Momentary Contact Operation

DS1832	$6.00	Feraloy



For Standard Operation, On or Off

DS1282	$6.00	Feraloy

For Momentary Contact Operation Normally On

DS1262	$6.00	Feraloy

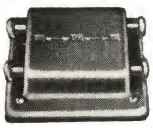
For Momentary Contact Operation Normally Off

DS1272	$6.00	Feraloy

For Standard Operation "On" or "Off"

Take P&S-Despard, Bryant, Hubbell, Arrow-H.&H., and GE Interchangeable Switches. Furnished with Switch Mounting Bridges.





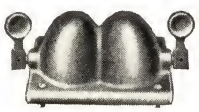


	Cat. No.	List Each	Material
For 2 Switches	DS1012	$6.00	Feraloy
For 4 Switches	DS1022	9.00	Feraloy
For 6 Switches	DS1032	12.00	Feraloy



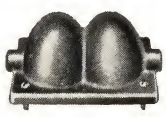
For External Operation of Double Push Button Switches
Furnished with Handle

Cat. No.	List Each	Material
DS1082	$6.00	Feraloy



For Momentary Contact Switches

DS1072	$6.00	Feraloy



For Double Push Button or Momentary Contact Switches

Furnished with Key§

DS1062	$6.00	Feraloy

§Extra keys for Vaportight Cover, Cat. No. Key 1—List Price, **$0.40.**

CROUSE-HINDS CONDULETS

FS AND FD SERIES 3-GANG CONDULETS

FS Series Condulets take Covers and Shallow Flush Rectangular Wiring Devices.

FD Series Condulets take Covers and Deep or Shallow Flush Rectangular Wiring Devices.

Overall Dimensions, exclusive of hubs: FS—Length, $4\frac{5}{16}$"; width, $6\frac{1}{2}$"; depth, $1\frac{7}{8}$": FD—Length, $4\frac{5}{16}$"; width, $6\frac{1}{2}$"; depth, $2\frac{11}{16}$". FS Condulets can be furnished with flat face ($4\frac{1}{2}$x$6\frac{1}{2}$x$2\frac{1}{16}$ inches) to take standard wall plates at the same list prices; add Suffix S24 to catalog number.

FS Series take devices $1\frac{5}{8}$" deep or less.

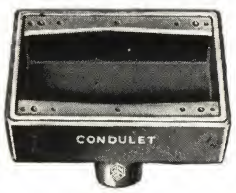
FD Series take devices $2\frac{3}{8}$" deep or less.

Threaded for Rigid Conduit (Thick Wall)

Type FS or FD



Type FSA or FDA



Cat. No.	List Each	Size	Cat. No.	List Each
FS23	$3.60	¾	FSA23	$3.60
FS33	3.90	1	FSA33	3.90
FD23	4.20	¾	FDA23	4.20
FD33	4.50	1	FDA33	4.50

Type FSC or FDC



Type FSS or FDS

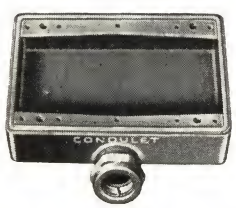


FSC23	$3.80	¾	FSS23	$4.10
FSC333	4.10	1	.....	.....
FDC23	4.40	¾	FDS223	4.90
FDC333	4.70	1	.....	.....
FDC43	7.00	1¼	.....	.....

Threadless

Illustrations shown above listings are for Rigid Conduit (Thick Wall).

Type FS or FD



Type FSC or FDC



Thick Wall Cat. No.	Thin Wall Cat. No.	List Each	Size	Thick Wall Cat. No.	Thin Wall Cat. No.	List Each
FS293	FS23-MT	$3.80	¾	FSC293	FSC23-MT	$4.20
FS393	FS33-MT	4.20	1	FSC393	FSC333-MT	4.70
FD293	FD23-MT	4.40	¾	FDC293	FDC23-MT	4.80
FD393	FD33-MT	4.80	1	FDC393	FDC333-MT	5.30
.....	.....	.....	1¼	.....	FDC43-MT	7.80

CROUSE-HINDS CONDULETS

3-GANG CONDULET COVERS

For Condulets of the FS and FD Series, 3-Gang and Type ExF 3-Gang Extensions

For Double Push Button, Double Push Button Momentary Contact, and Double Push Lock Switches



Sheet Steel

Cat. No.	List Each	Style
S83	$0.90	Surface
SS83	.90	Flush



Cast Feraloy—Guarded

S83g	$2.00	Surface or Flush

For Tumbler Flush Switches with Square Handles



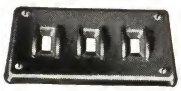
Sheet Steel

S323	$0.90	Surface
SS323	.90	Flush



Sheet Steel—Guarded

S523	$1.50	Surface
SS523	1.50	Flush



Cast Feraloy—Guarded

S323g	$2.00	Surface
S323g	2.00	Flush

Blank Metal Covers



Sheet Steel

S1003	$0.80	Surface
SS1003	.80	Flush



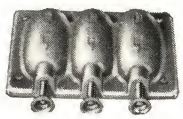
Cast Feraloy—with Gasket

S1003g	$1.50	Surface
S1003g	1.50	Flush

3-GANG VAPORTIGHT COVERS

For Condulets of the FS and FD Series, 3-Gang and Type ExF Extensions, 3-Gang With Switch Operating Mechanism

For External Operation of Tumbler Switches



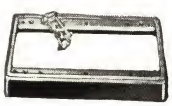
Surface or flush; furnished with gasket.

Cast Feraloy

For Standard Operation "On" and "Off"		For Momentary Contact Operation		
No.	Each	No.	Each	Normally
DS1283	$8.50	DS1263	$8.50	"On"
		DS1273	8.50	"Off"

TYPE ExF THREE-GANG EXTENSIONS

For FS and FD Series Condulets, 3-Gang



ExF13



ExF43

Depth Ext.	Cat. No.	List Each
1	ExF13	$2.90
4⅝	ExF43	7.50

CROUSE-HINDS CONDULETS

FS AND FD SERIES 4-GANG CONDULETS

FS Series Condulets, Four-Gang take Covers and Shallow Flush Rectangular Wiring Devices

FD Series Condulets, Four-Gang take Covers and Deep or Shallow Flush Rectangular Wiring Devices

Overall Dimensions, exclusive of hubs: FS—Length, $4\frac{5}{16}$"; width, $8\frac{3}{8}$"; depth, $1\frac{7}{8}$": FD—Length, $4\frac{5}{16}$"; width, $8\frac{3}{8}$"; depth, $2\frac{11}{16}$".

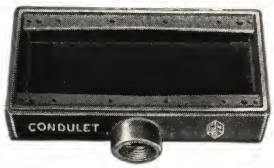
FS Condulets can be furnished with flat face ($4\frac{1}{2}$x$8\frac{5}{16}$x$2\frac{1}{16}$ inches) to take standard wall plates at the same list prices; add suffix S24 to catalog number.

FS Series take devices $1\frac{5}{8}$" deep or less.

FD Series take devices $2\frac{3}{8}$" deep or less.

Threaded for Rigid Conduit (Thick Wall)

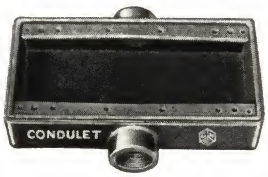
Type FS or FD **Type FSA or FDA**

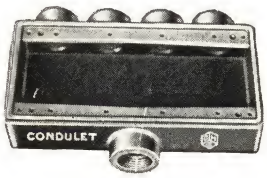




Cat. No.	List Each	Size	Cat. No.	List Each
FS24	$4.40	¾	FSA24	$4.40
FS34	4.80	1	FSA34	4.80
FD24	5.20	¾	FDA24	5.20
FD34	5.60	1	FDA34	5.60

Type FSC or FDC **Type FSD or FDB**



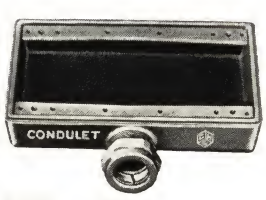


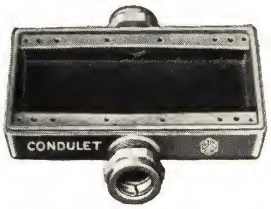
		½	FSD14	$5.20
FSC24	$4.70	¾★	FSD214	5.70
FSC34	5.00	1★	FSD314	6.20
		½	FDB14	6.00
FDC24	5.50	¾★	FDB214	6.50
FDC34	5.80	1★	FDB314	7.00

Threadless

Illustrations shown above listings are for Rigid Conduit (Thick Wall).

Type FS or FD **Type FSC or FDC**





Thick Wall No.	Thin Wall No.	List Each	Size	Thick Wall No.	Thin Wall No.	List Each
FS294	FS24-MT	$4.60	¾	FSC294	FSC24-MT	$5.10
FS394	FS34-MT	5.10	1	FSC394	FSC34-MT	5.60
FD294	FD24-MT	5.40	¾	FDC294	FDC24-MT	5.90
FD394	FD34-MT	5.90	1	FDC394	FDC34-MT	6.40

★The hubs at the top in the illustration are ½-inch on Types FSD and FDB.

CROUSE-HINDS CONDULETS

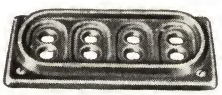
4-GANG CONDULET COVERS

For Condulets of the FS and FD Series, 4-Gang and Type ExF 4-Gang Extensions

For Double Push Button, Double Push Button Momentary Contact, and Double Push Lock Switches



Cat. No.	List Each	Style
	Sheet Steel	
S84	$1.20	Surface
SS84	1.20	Flush



Cast Feraloy—Guarded		
S84g	$2.80	Surface or Flush

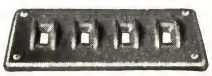
For Tumbler Flush Switches with Square Handles



Sheet Steel		
S324	$1.20	Surface
SS324	1.20	Flush



Sheet Steel—Guarded		
S524	$2.80	Surface
SS524	2.80	Flush



Cast Feraloy—Guarded		
S324g	$2.80	Surface
S324g	2.80	Flush

Blank Metal Covers



Sheet Steel		
S1004	$1.20	Surface
SS1004	1.20	Flush



Cast Feraloy—With Gasket		
S1004g	$2.00	Surface
S1004g	2.00	Flush

4-Gang Vaportight Covers With Switch Operating Mechanism



Surface or flush — furnished with gasket.

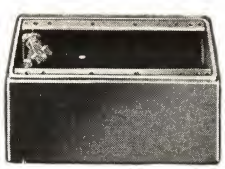
For External Operation of Tumbler Switches

Cast Feraloy

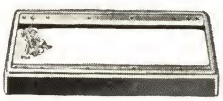
For Standard Operation "On" and "Off" No.	Each	For Momentary Contact Operation No.	Each	Normally
DS1284	$10.00	DS1264	$10.00	"On"
----------	---------	DS1274	10.00	"Off"

TYPE ExF 4-GANG EXTENSIONS

For Condulets of the FS and FD Series, 4-Gang



ExF44

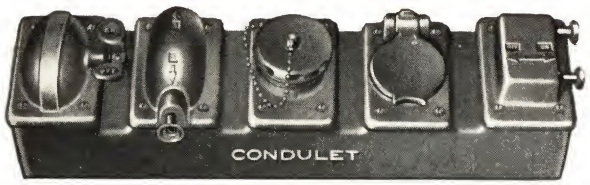


ExF14

Depth Ext.	Cat. No.	List Each
1	ExF14	$3.30
4⅝	ExF44	9.00

CROUSE-HINDS CONDULETS

TYPES FS AND FD MULTIPLE GANG CONDULETS — Without Hubs



Type FS, Five Gang With Push Button and Tumbler Switch Covers, and Threaded Cap and Spring Door Housings



Type FS, Two-Gang Tandem



Type FS, Three-Gang

Listed without hubs. Can be furnished with brazed conduit hubs complete with integral bushings or can be drilled on the job and used with locknut and bushing. Take all individual covers to make up combination of several devices in one Condulet.

No. of Gangs	Type FS No.	Type FS Each	Type FD No.	Type FD Each
Single	FS01	$1.00	FD01	$1.20
Two-Gang Tandem	FS097	2.50	FD097	2.90
Two-Gang	FS02	2.50	FD02	2.90
Three-Gang	FS03	4.00	FD03	4.60
Four-Gang	FS04	5.50	FD04	6.30
Five-Gang	FS05	7.00	FD05	8.00

When ordering with brazed hubs specify type (threaded, union, threadless thin wall or threadless thick wall), size, and location of each hub. Furnish description or sketch of hub layout desired.

Prices of Brazed Hubs

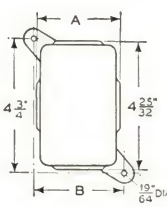
Size In.	Threaded	Union	Threadless Thick Wall or Thin Wall
½	$1.10	$1.80	$1.50
¾	1.20	1.80	1.70
1	1.40	2.20	2.00
1¼ *	1.70	3.20	2.40
1½ *	2.00	--------	--------

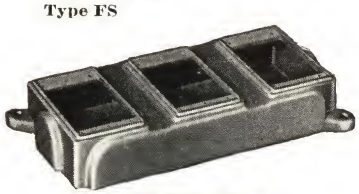
*For FD Series only.

TYPE FS CONDULETS With Bosses for Tapping



Type FS





Type FS Three-Gang

No.	Each	Condulet	Dimensions A	B	Depth
FS019	$1.50	Single	3¼	3¼	1 31/32
FS029	3.00	Two-Gang	7	7	1 31/32
FS039	4.50	Three-Gang	10¾	10¾	1 31/32

DRILLING AND TAPPING INFORMATION

These Condulets can be drilled and tapped on the job or if specified will be drilled and tapped at the factory for the following prices per opening: ½ or ¾ inch, **$0.10**; 1 inch, **$0.20.**

CROUSE-HINDS CONDULETS

SK SERIES CONDULETS

For Concealed Installations in Concrete

Take covers, vaportight fixtures, or 3¼-inch outlet box round base wiring devices with 2¾-inch screw centers.

A gasket is made for use with blank covers, so that when used with SK Series Condulets, an excellent vaportight junction box is provided.



Type SK



Type SKC



Type SKL



Type SKT



Type SKX

Size In.	2-Inch Depth No.	2-Inch Depth Each	3-Inch Depth No.	3-Inch Depth Each
	Type SK			
½	SK12	$2.00	SK13	$2.30
¾	SK22	2.20	SK23	2.50
1	SK32	2.40	SK33	2.70
	Type SKC			
½	SKC12	$2.20	SKC13	$2.50
¾	SKC22	2.40	SKC23	2.70
1	SKC32	2.60	SKC33	2.90
	Type SKL			
½	SKL12	$2.20	SKL13	$2.50
¾	SKL22	2.40	SKL23	2.70
1	SKL32	2.60	SKL33	2.90
	Type SKT			
½	SKT12	$2.40	SKT13	$2.70
¾	SKT22	2.60	SKT23	2.90
1	SKT32	2.80	SKT33	3.10
	Type SKX			
½	SKX12	$2.60	SKX13	$2.90
¾	SKX22	2.80	SKX23	3.10
1	SKX32	3.00	SKX33	3.30

COVERS AND GASKETS

For SK Series Condulets



Blank Cover

No.	Each	Material	Size Hub In.
SK809	$0.60	Cast Feraloy	....



Hub Covers

SK83	$1.30	Cast Feraloy	⅜
SK84	1.30	Cast Feraloy	½
SK86	1.50	Cast Feraloy	¾



Gasket

For use between Condulets and wiring devices or covers.

Gask 208 $0.50 ....

GRF SERIES CONDULETS



Body Only With Lugs

GRF Series Condulets take Flush or Surface Covers, Vaportight Lighting Fixtures, Fixture Hangers and Receptacles with Housings.



Body Only Without Lugs

Bodies Only — Without Tapping

Cast Feraloy

Inside Depth In.	Without Lugs No.	Without Lugs Each	With Lugs No.	With Lugs Each
1½	GRF1	$1.55	GRF19	$1.75
2¼	GRF2	2.00	GRF29	2.20
3	GRF3	2.30	GRF39	2.50

CROUSE-HINDS CONDULETS

COVERS FOR GRF SERIES CONDULETS







Blank Metal Covers

Surface Cat. No.	Surface List Each	Hub Size	Material	Flush Cat. No.	Flush List Each
GRF10	$0.55	....	Feraloy	GRF50	$0.90
			Hub Covers		
GRF11	1.10	½	Feraloy	GRF51	1.20
GRF12	1.30	¾	Feraloy	GRF52	1.40
			Gaskets		
Gask 643	.20	....	Rubber	Gask 690	.15

TYPE GRV AND VGR VAPORTIGHT INDUSTRIAL LIGHTING FIXTURES

For Surface or Flush Mounted GRF Series Condulets

Screw Guard Type



Pendent Type

Form 100 is furnished with Globe V75 and Guard V911, and takes 50, 60, 75, or 100-Watt Lamps.



Bracket Type

Form 200 is furnished with Globe V200 and Guard V912, and takes 150 or 200-watt Lamps.

Form	Style	With Globe and Guard — Pendent Type No.	Pendent Type Each	Bracket Type No.	Bracket Type Each
100	Surface	GRV34	$9.10	VGR1139	$10.50
100	Flush	GRV1493	9.10	VGR1129	10.50
200	Surface	GRV32	10.20	VGR1239	12.00
200	Flush	GRV2493	10.20	VGR1229	12.00

Feraloy lighting fixtures are regularly furnished with cast aluminum guards.

TYPE ARB FLEXIBLE FIXTURE HANGER

For Pendent Fixtures with ½-Inch Stems



Type ARB Cushion Hanger

Wt. Fixture Lbs.	Surface No.	Surface Each	Flush No.	Flush Each
2 to 4	ARB142	$1.50	ARB144	$1.70
4 to 8	ARB82	1.50	ARB84	1.70
8 to 16	ARB102	1.50	ARB104	1.70
16 to 30	ARB122	1.50	ARB124	1.70

TYPE ARB RECEPTACLE HOUSINGS

Take Type BP Plugs



Without Spring Door



With Spring Door



With Threaded Cap

25-A., 125-V. D.C.; 30-A., 250-V. D.C.

Style	2-Pole No.	2-Pole Each	3-Pole No.	3-Pole Each	4-Pole No.	4-Pole Each
	Without Spring Door					
Surf.	ARB323	$5.70	ARB333	$7.20	ARB343	$8.50
Flush	ARB223	5.90	ARB233	7.40	ARB243	8.70
	With Spring Door					
Surf.	ARB321	8.90	ARB331	10.80	ARB341	12.50
Flush	ARB221	9.10	ARB231	11.00	ARB241	12.70
	With Threaded Cap					
Surf.	ARB327	8.00	ARB337	10.40	ARB347	12.60
Flush	ARB227	8.20	ARB237	10.60	ARB247	12.80

CROUSE-HINDS CONDULETS
SE SERIES CONDULETS

Take covers or 3¼-inch octagonal outlet box round base wiring devices.



Type SE

Size In.	Cat. No.	List Each
½	SE1	$1.60
¾	SE2	1.80
1	SE3	2.20



Type SEC

Size In.	Cat. No.	List Each
½	SEC1	$1.90
¾	SEC2	2.10
1	SEC3	2.50



Type SET

Size In.	Cat. No.	List Each
½	SET1	$2.10
¾	SET2	2.30
1	SET3	2.70



Type SEX

Size In.	Cat. No.	List Each
½	SEX1	$2.30
¾	SEX2	2.50
1	SEX3	2.90

SEH SERIES CONDULETS

Take 4-inch octagonal outlet box round base wiring devices or SEH covers.



Type SEH

Size In.	Cat. No.	List Each
½	SEH1	$1.60
¾	SEH2	1.80
1	SEH3	2.20



Type SEHC

Size In.	Cat. No.	List Each
½	SEHC1	$1.90
¾	SEHC2	2.10
1	SEHC3	2.50



Type SEHT

Size In.	Cat. No.	List Each
½	SEHT1	$2.10
¾	SEHT2	2.30
1	SEHT3	2.70



Type SEHX

Size In.	Cat. No.	List Each
½	SEHX1	$2.30
¾	SEHX2	2.50
1	SEHX3	2.90

COVERS AND GASKETS
For SE and SEH Series Condulets

Covers can be used with or without Gasket







Blank Covers

Cat. No.	List Each	Material	Size Hub In.	Cat. No.	List Each
SEH000	$0.30	Sheet Steel	....	.....	.....
SEH00	.60	Feraloy	....	SE00	$1.30
		Hub Covers			
SEH83	$1.30	Feraloy	⅜	SE83	$1.40
SEH84	1.30	Feraloy	½	SE84	1.40

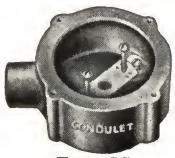
Gaskets

For use between Condulets and covers or wiring devices.

Gask 202 $0.40 **Gask 156 $0.40**

CROUSE-HINDS CONDULETS
GS SERIES CONDULETS
With Fastening Strap for Wiring Devices

Take covers, fixtures, round base snap switches, vaportight fixtures, receptacles with housings, or connection blocks.



Type GS



Type GSA



Type GSC

Size In.	Cat. No.	List Each	Cat. No.	List Each	Cat. No.	List Each
			Form 5			
½	GS15	$1.80	GSA15	$1.80	GSC15	$2.00
¾	GS25	2.10	GSA25	2.10	GSC25	2.30
1	GS35	2.50	GSA35	2.50	GSC35	2.70
			Form 10			
½	GS110	$1.80	GSA110	$1.80	GSC110	$2.00
¾	GS210	2.10	GSA210	2.10	GSC210	2.30
1	GS310	2.50	GSA310	2.50	GSC310	2.70
			Form 20			
½	GS120	$3.00	GSA120	$3.00	GSC120	$3.20
¾	GS220	3.30	GSA220	3.30	GSC220	3.50
1	GS320	3.70	GSA320	3.70	GSC320	3.90



Type GSL



Type GST



Type GSX

Size In.	Cat. No.	List Each	Cat. No.	List Each	Cat. No.	List Each
			Form 5			
½	GSL15	$2.00	GST15	$2.40	GSX15	$2.70
¾	GSL25	2.30	GST25	2.70	GSX25	3.00
1	GSL35	2.70	GST35	3.10	GSX35	3.60
			Form 10			
½	GSL110	$2.00	GST110	$2.40	GSX110	$2.70
¾	GSL210	2.30	GST210	2.70	GSX210	3.00
1	GSL310	2.70	GST310	3.10	GSX310	3.60
			Form 20			
½	GSL120	$3.20	GST120	$3.60	GSX120	$3.90
¾	GSL220	3.50	GST220	4.00	GSX220	4.40
1	GSL320	3.90	GST320	4.60	GSX320	5.40

GS SERIES 2-GANG CONDULETS WITH LUGS

Take covers, fixtures, round base snap switches, vaportight fixtures, plug receptacle housings, or connection blocks. Furnished with fastening straps for wiring devices.



Type GSB 2-Gang



Type GSD 2-Gang

Size Inches	Cat. No.	List Each		Cat. No.	List Each
½	GSB1529	$4.20		GSD1529	$4.60
¾	GSB2529	4.80	Form 5	GSD2529	5.20
1	GSB3529	5.60		GSD3529	6.00
½	GSB1129	4.20		GSD1129	4.60
¾	GSB2129	4.80	Form 10	GSD2129	5.20
1	GSB3129	5.60		GSD3129	6.00
½	GSB1229	6.60		GSD1229	7.00
¾	GSB2229	7.20	Form 20	GSD2229	7.60
1	GSB3229	8.00		GSD3229	8.40

Forms 5, 10, and 20 indicate sizes of Condulets which take covers and wiring devices correspondingly classified. If specified on order, GS Series Condulets will be furnished with lugs, 30 cents extra. Also available in GS 3-Gang Series.

CROUSE-HINDS CONDULETS

COVERS AND ACCESSORIES FOR GS SERIES CONDULETS

Vaportight Switch Covers



Furnished with gasket.

Cat. No.	List Each	Form	Max. Dia. Sw. Base
GS58	$2.60	5	2 1/16
GS108	2.60	10	2 11/16
GS208	4.00	20	3 7/8

Blank Covers—Vaportight



With Gasket No.	Each	Form	Without Gasket No.	Each
GS50	$1.00	5	GS50a	$0.80
GS100	1.00	10	GS100a	1.00
GS200	1.80	20	GS200a	1.50

LAMP RECEPTACLES

Keyless—Composition—600 Watts, 600 Volts



No.	Without Lamp Grip Each	With Lamp Grip Each	Form
GS59	$1.00	.....	5
GS569	.....	$1.20	5

Key Receptacle—Armored



With Lamp Grip
250 Watts, 250 Volts

No.	Each	Form
GS549	$4.00	5

MIDGET GUARD FIXTURES

Consists of holder, guard, receptacle and gaskets.



No.	Each	Length Guard, In.	Form
GS1631	$6.10	5¼	10

CONNECTION BLOCKS

Composition



5-Wire

5-Wire—20 Amperes, 125 Volts

No.	Each	Form
CF210	$1.30	10 and 20

2-Wire—30 Amperes, 250 Volts

CF209	1.70	20



2-Wire

FUSE BLOCK—Composition

Main Line, 2-Pole
30 Amperes, 250 Volts



No.	Each	Form
GS34	$1.50	20

TYPE GS VAPORTIGHT FIXTURES

For GS Series Form 20 Condulets
Screw Guard Type



Pendent Type

Form 100 is furnished with No. V75 globe and No. V911 guard, and takes 50, 60, 75, or 100-watt lamps.

Form 200 is furnished with No. V200 globe and No. V912 guard, and takes 150 or 200-watt lamps.



Bracket Type

Pendent Type

Form	With Globe and Guard No.	Each	Without Globe and Guard No.	Each
100	GS675	$9.50	GS6	$4.30
200	GS8200	11.00	GS8	4.90

Bracket Type

100	GS775	$9.50	GS7	$4.30
200	GS9200	11.00	GS9	4.90

Forms 5, 10, and 20 indicate sizes of Condulets which take covers and wiring devices correspondingly classified.

CROUSE-HINDS CONDULETS

ACCESSORIES FOR GS SERIES CONDULETS

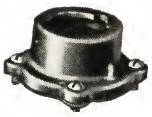
TYPE BRG PLUG RECEPTACLE HOUSINGS

‡30 Amperes, 250 Volts A.C.

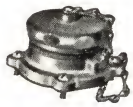
These housings take Type BP plugs.



With Spring Door



Without Spring Door



With Threaded Cap

With Spring Door

Form	2-Pole Cat. No. BRG-	List Each	3-Pole Cat. No. BRG-	List Each	4-Pole Cat. No. BRG-	List Each
5	56302	$8.20	.....	.....	.....	.....
10	16302	8.20	16303	$10.10	16304	$11.80
20	26302	9.40	26303	11.10	26304	12.80

Without Spring Door

5	5302	$5.00	.....	.....	.....	.....
10	1302	5.00	1303	$ 6.50	1304	$ 7.80
20	2302	6.20	2303	7.50	2304	8.80

With Threaded Cap

Furnished with gasket.

5	58302	$7.30	.....	.....	.....	.....
10	18302	7.30	18303	$ 9.70	18304	$11.90
20	28302	8.50	28303	10.70	28304	12.90

TYPE GS PLUG RECEPTACLE HOUSINGS

15 Amperes, 125 Volts or 10 Amperes, 250 Volts

For "standard" attachment plug caps.



With Spring Door



Without Spring Door



With Threaded Cap**

With Spring Door

Form	2-Wire, 2-Pole Cat. No.	List Each	*2-Wire, 3-Pole Cat. No.	List Each	3-Wire, 3-Pole Cat. No.	List Each
5	GS583	$6.20	GS584	$7.60	GS591	$7.60
10	GS183	6.20	GS184	7.60	GS191	7.60
20	GS283	7.40	GS284	8.80	GS291	8.80

Without Spring Door

5	GS585	$3.00	GS586	$4.40	GS592	$4.40
10	GS185	3.00	GS186	4.40	GS192	4.40
20	GS285	4.20	GS286	5.60	GS292	5.60

With Threaded Cap

Furnished with gasket.

5	GS581	$5.30	GS582	$6.70	GS590	$6.70
10	GS181	5.30	GS182	6.70	GS190	6.70
20	GS281	6.50	GS282	7.90	GS290	7.90

*Third pole grounded.

**Take Crouse-Hinds Type WP plugs.

‡Can be used on 25-Amp., 125-Volt, D.C. circuits; or on 30-Amp., 250-Volt, D.C. circuits if circuit is broken before plug is withdrawn.

Forms 5, 10, and 20 indicate sizes of Condulets which take covers and wiring devices correspondingly classified.

CROUSE-HINDS CONDULET EQUIPMENT

For REA Rural Electrification Wiring



Type VRA		Type VRB		Type VRO		Type VR	
Lamp Watts	Cat. No.	List Each	Lamp Watts	Cat. No.	List Each		
25—100	VRA110	$3.30	25—100	VRO410	$3.20		
25—100	VRB110	5.70	.....	VR10	1.60		

FS SERIES
Switch and Plug Receptacle Condulets



FS Series Switches

Type FS				Type FSC	
Cat. No.	List Each		Rating	Cat. No.	List Each
FS1311	$4.00	1-Pole	10 T.-125 V. 5 A.-250 V.	FSC1311	$4.20
FS1312	4.90	2-Pole	10 T.-125 V. 10 A.-250 V.	FSC1312	5.05
FS1313	4.20	3-Way	10 T.-125 V. 5 A.-250 V.	FSC1313	4.35
FS1314	7.85	4-Way	5 T.-125 V. 2 A.-250 V.	FSC1314	8.00

FS Series Plug Receptacles with Spring Door



Type FS			Type FSC	
Receptacle—15 Amp.-125 V.—10 Amp.-250 V.				
Cat. No.	List Each		Cat. No.	List Each
FS1514	$4.25	2-Wire, 2-Pole	FSC1514	$4.45
FS1515	4.60	2-Wire, 3-Pole	FSC1515	4.80
FS1516	4.80	3-Wire, 3-Pole	FSC1516	5.00

FS Series Plug Receptacles with Threaded Cap and Chain



Type FS			Type FSC	
Receptacle—15 Amp.-125 V.—10 Amp.-250 V.				
Cat. No.	List Each		Cat. No.	List Each
FS1614	$4.70	2-Wire, 2-Pole	FSC1614	$4.90
FS1615	5.80	2-Wire, 3-Pole	FSC1615	5.95
FS1616	5.95	3-Wire, 3-Pole	FSC1616	6.15

CROUSE-HINDS CONDULETS
GUA SERIES JUNCTION CONDULETS

Explosion-Proof and Dust-Tight, and Weather Resistant (Raintight)

Class I, Groups C and D; Class II, Groups E, F, and G and Class III



Type GUA Type GUAC Type GUAB



Furnished with surface covers, but can be furnished without covers or with flush, sealing or nipple covers, or fixture canopies.



With Threaded Hubs						With Union Hubs	
Cat. No.	List Each	Hub Size In.	Nom. Diam. Cover Open., In.	Outside Dimen. of Body, In. Diam.	Dpth.	Cat. No.	List Each
Type GUA							
GUA14	$2.90	½	2	2½	2¼	.....	.....
.....	.....	½	2	2½	2	GUA645	$3.60
GUA24	3.00	¾	2	2½	2½	GUA745	3.60
GUA16	3.60	½	3	3½	2	.....	.....
GUA26	3.70	¾	3	3½	2	GUA765	4.30
GUA36	3.80	1	3	3½	2 5/16	GUA865	4.80
GUA47	6.30	1¼	3⅝	4¼	2 11/16	.....	.....
Type GUAC							
GUAC14	$3.10	½	2	2½	2¼	.....	.....
.....	.....	½	2	2½	2	GUAC645	$4.50
GUAC24	3.30	¾	2	2½	2½	GUAC745	4.50
GUAC16	3.80	½	3	3½	2	.....	.....
GUAC26	4.00	¾	3	3½	2	GUAC765	5.20
GUAC36	4.20	1	3	3½	2 5/16	GUAC865	6.20
GUAC47	6.80	1¼	3⅝	4¼	2 11/16	.....	.....
GUAC59	14.20	1½	5	5¾	3¾	.....	.....
Type GUAB							
GUAB14	$3.10	½	2	2½	2¼	.....	.....
.....	.....	½	2	2½	2	GUAB645	$4.50
GUAB24	3.30	¾	2	2½	2	GUAB745	4.50
GUAB16	3.80	½	3	3½	2	GUAB665	5.20
GUAB26	4.00	¾	3	3½	2	GUAB765	5.20
GUAB36	4.20	1	3	3½	2 5/16	.....	.....
GUAB47	6.80	1¼	3⅝	4¼	2 11/16	.....	.....
GUAB59	14.20	1½	5	5¾	3¾	.....	.....



Type GUAD Type GUAL

Type GUAD							
GUAD14	$3.30	½	2	2½	2¼	.....	.....
.....	.....	½	2	2½	2	GUAD645	$5.40
GUAD24	3.60	¾	2	2½	2½	GUAD745	5.40
GUAD16	4.00	½	3	3½	2	GUAD665	6.10
GUAD26	4.30	¾	3	3½	2	GUAD765	6.10
GUAD36	4.50	1	3	3½	2 5/16	.....	.....
Type GUAL							
GUAL14	$3.10	½	2	2½	2¼	.....	.....
.....	.....	½	2	2½	2	GUAL645	$4.50
GUAL24	3.30	¾	2	2½	2½	GUAL745	4.50
GUAL16	3.80	½	3	3½	2	.....	.....
GUAL26	4.00	¾	3	3½	2	.....	.....
GUAL36	4.20	1	3	3½	2 5/16	GUAL865	6.20
GUAL47	6.80	1¼	3⅝	4¼	2 11/16	.....	.....
GUAL59	14.20	1½	5	5¾	3¾	.....	.....

Prices for combinations of threaded and union hubs upon request.

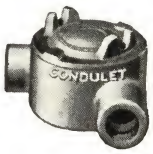
CROUSE-HINDS CONDULETS

GUA SERIES JUNCTION CONDULETS

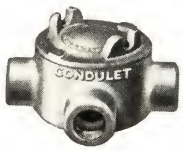
Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)

Class I, Groups C and D; Class II, Groups E, F, and G and Class III

Furnished with surface covers, but can be furnished without covers or with flush, sealing or nipple covers, or fixture canopies.

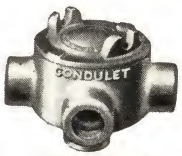


Type GUAN



Type GUAT

With Threaded Hubs Cat. No.	List Each	Hub Size In.	Nom. Diam. Cover Open., In.	Outside Dimen. of Body, In. Diam.	Dpth.	With Union Hubs Cat. No.	List Each
Type GUAN							
GUAN14	$3.10	½	2	2½	2⅛	.....	.....
.....	.....	½	2	2½	2	GUAN645	$4.50
GUAN24	3.30	¾	2	2½	2 5/16	GUAN745	4.50
GUAN26	4.00	¾	3	3½	2	.....	.....
GUAN36	4.20	1	3	3½	2 5/16	GUAN865	6.20
GUAN47	6.80	1¼	3⅝	4¼	2 11/16	.....	.....
Type GUAT							
GUAT14	$3.30	½	2	2½	2¼	.....	.....
.....	.....	½	2	2½	2	GUAT645	$5.40
GUAT24	3.60	¾	2	2½	2½	GUAT745	5.40
GUAT16	4.00	½	3	3½	2	GUAT665	6.10
GUAT26	4.30	¾	3	3½	2	GUAT765	6.10
GUAT37	7.00	1	3⅝	4¼	2 5/16	GUAT875	10.00
GUAT49	14.50	1¼	5	5¾	3¾	GUAT995	22.00



Type GUAW



Type GUAX

Type GUAW							
GUAW14	$3.50	½	2	2½	2¼	.....	.....
.....	.....	½	2	2½	2	GUAW645	$6.30
GUAW24	3.90	¾	2	2½	2½	GUAW745	6.30
GUAW16	4.20	½	3	3½	2	GUAW665	7.00
GUAW26	4.60	¾	3	3½	2	GUAW765	7.00
Type GUAX							
GUAX14	$3.50	½	2	2½	2¼	.....	.....
.....	.....	½	2	2½	2	GUAX645	$6.30
GUAX24	3.90	¾	2	2½	2½	GUAX745	6.30
GUAX16	4.20	½	3	3½	2	GUAX665	7.00
GUAX26	4.60	¾	3	3½	2	GUAX765	7.00
GUAX37	7.40	1	3⅝	4¼	2 5/16	GUAX875	11.40
GUAX49	15.00	1¼	5	5¾	3¾	GUAX995	25.00

Prices for combinations of threaded and union hubs upon request.

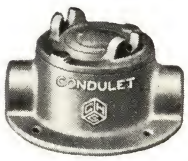
CROUSE-HINDS CONDULETS

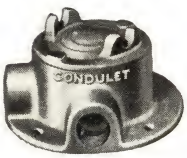
GUF SERIES JUNCTION CONDULETS

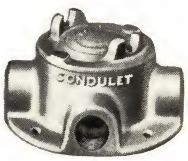
Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)

Class I, Groups C and D; Class II, Groups E, F, and G and Class III

Furnished with surface cover and threaded hubs.





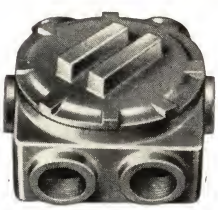




Hub Size In.	Cover Opening In.	Cat. No.	List Each
Type GUFC			
½	3	GUFC16	$4.60
¾	3	GUFC26	4.80
1	3	GUFC36	5.20
1	5	GUFC39	15.50
Type GUFL			
½	3	GUFL16	$4.60
¾	3	GUFL26	4.80
1	3	GUFL36	5.20
1	5	GUFL39	15.50
Type GUFT			
½	3	GUFT16	$5.00
¾	3	GUFT26	5.20
1	3	GUFT36	5.60
1	5	GUFT39	15.90
Type GUFX			
½	3	GUFX16	$5.40
¾	3	GUFX26	5.60
1	3	GUFX36	6.00
1	5	GUFX39	16.30

TYPE GUP JUNCTION CONDULETS

Explosion-Proof and Dust-Tight



Especially suitable for gasoline pump installations that are to be rewired to comply with the new inspection requirements for hazardous locations.

Hubs tapped for ¾-inch conduit. Cover opening, 3⅝ inches in diameter.

2 in Top—1 in Each Side 2 in Bottom—None in Back (With 3 Pipe Plugs) No.	Hubs	Each	2 in Top—1 in Each Side 2 in Bottom—4 in Back (With 7 Pipe Plugs) No.	Hubs	Each
GUP215	6	$5.40	GUP214	10	$5.80

Dimensions of body, exclusive of hubs: Length, 4⅛ inches; width, 4⅛ inches; depth, 2½ inches.

CROUSE-HINDS CONDULETS

GUJ SERIES JUNCTION CONDULETS

Explosion-Proof and Dust-Tight



Type GUJ



Type GUJC



Type GUJL

Hub Size	Cat. No.	List Each	Cat. No.	List Each	Cat. No.	List Each
½	GUJ16	$3.60	GUJC16	$3.80	GUJL16	$3.80
¾	GUJ26	3.70	GUJC26	4.00	GUJL26	4.00
1	GUJ36	3.80	GUJC36	4.20	GUJL36	4.20



Type GUJB



Type GUJT



Type GUJX

Hub Size	Cat. No.	List Each	Cat. No.	List Each	Cat. No.	List Each
½	GUJB16	$3.80	GUJT16	$4.00	GUJX16	$4.20
¾	GUJB26	4.00	GUJT26	4.30	GUJX26	4.60
1	GUJB36	4.20	GUJT36	4.60	GUJX36	5.00

THREADED COVERS



Flat Cover



Dome Cover



Fixture Cover Union Hub Type

Cat. No.	List Each	Cat. No.	Depth In.	List Each	Cat. No.	Fix. Stem, In.	List Each
GUJ06	$1.50	GUJ0611	1	$1.80	GUJ0686	½	$5.50
		GUJ0612	2	2.20	GUJ0687	¾	5.50

UNION HUB NUTS AND SLEEVES

For GUA Series Condulets Without Nuts and Sleeves





Cat. No.	List Each	Nut In.	Sleeve In.	Cat. No.	List Each	Nut In.	Sleeve In.
GUH-				GUH-			
215	$0.50	¾	½	525	$2.50	1½	¾
25	.50	¾	¾	55	2.50	1½	1½
315	.70	1	½	635	4.50	2	1
325	.70	1	¾	65	4.50	2	2
35	.70	1	1	75	6.50	2½	2½
425	1.50	1¼	¾	85	8.50	3	3
45	1.50	1¼	1¼	------	--------	------	------

Threaded Blank Caps

Cat. No.	List Each	Nut In.	Sleeve In.	Cat. No.	List Each	Nut In.	Sleeve In.
GUH-				GUH-			
20	$0.30	¾	------	30	$0.40	1	------

CROUSE-HINDS CONDULETS

GUA SERIES JUNCTION CONDULETS

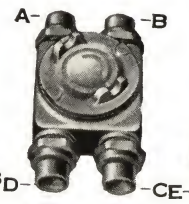
With Union Hubs

Explosion-Proof and Dust-Tight

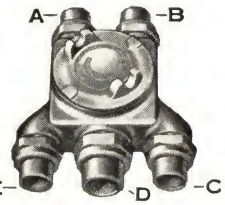
Outside dimensions of body: length, 3¾ inches; depth, $1\frac{15}{16}$ inches at corners, 3⅛ inches over covers; nominal diameter of cover opening, 3 inches. Width, type GUAQ, 5⅝ inches; other types, 3¾ inches.



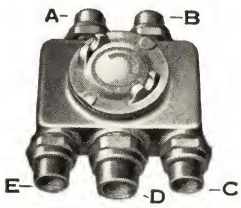
Type GUAG



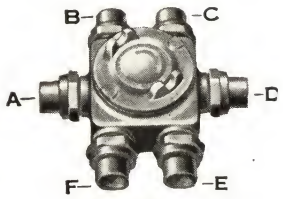
Type GUAH



Type GUAP



Type GUAQ



Type GUAF

Type GUAG

Hub Sizes —Inches— A B C	Without Nuts and Sleeves No.	Without Nuts and Sleeves Each	With Nuts and Sleeves No.	With Nuts and Sleeves Each
½-½-½			GUAG-	
¾-¾-¾			6665	$7.00
½-¾-¾			7775	7.00
¾-½-½	GUAG706	$5.50	6775	7.00
½-¾-½			7665	7.00
			6765	7.00

Type GUAH

A B C D			GUAH-	
½-½-½-½			66665	$7.90
¾-¾-¾-¾	GUAH706	$5.90	77775	7.90
½-½-¾-¾			66775	7.90
½-½-¾-½			66765	7.90

Type GUAP

A B C D E			GUAP-	
½-½- ½- ¾- ½			666765	$8.80
½-½- ½-1 - ½			666865	8.80
½-½- ¾- ¾- ¾	*GUAP706	$6.30	667775	8.80
½-½- ¾-1 - ¾			667875	8.80
¾-¾- ¾- ¾- ¾			777775	8.80
¾-¾- ¾-1 - ¾			777875	8.80
½-½-1 -1 -1	†GUAP7806	6.70	668885	9.80
¾-¾-1 -1 -1			778885	9.80

Type GUAQ

A B C D E			GUAQ-	
½-½-½- ¾-½			666765	$9.90
½-½-½-1 -½			666865	9.90
½-½-¾- ¾-¾	*GUAQ706	$7.40	667775	9.90
½-½-¾-1 -¾			667875	9.90
¾-¾-¾- ¾-¾			777775	9.90
¾-¾-¾-1 -¾			777875	9.90

Type GUAF

A B C D E F			GUAF-	
½-½-½-½-½-½			6666665	$10.80
½-¾-¾-½-¾-¾			6776775	10.80
½-½-½-½-¾-¾	GUAF706	$7.80	6666775	10.80
¾-¾-¾-¾-¾-¾			7777775	10.80
¾-½-½-¾-½-½			7667665	10.80
¾-½-½-¾-¾-¾			7667775	10.80

*The D hub requires the use of a 1-inch nut for ½, ¾, and 1-inch sleeve.

†The C, D and E hubs require the use of a 1-inch nut for ½, ¾, and 1-inch sleeve.

CROUSE-HINDS CONDULETS

THREADED COVERS, CANOPIES AND ADAPTERS

For GUA and GUF Series Condulets

Used interchangeably on Condulets of GUA and GUF series.





In. Diam. Open.	Surface Covers Cat. No.	List Each	Flush Covers Cat. No.	List Each	Sealing Covers Cat. No.	List Each
2	GUA04	$1.30	GUA049	$1.30	GUA041	$1.60
3	GUA06	1.50	GUA069	1.50	GUA062	2.00
3⅝	GUA07	2.20	GUA079	2.20	GUA072	2.60
5	GUA09	6.70	GUA099	6.70	GUA092	7.50




In. Diam. Open.	In. Fix. Stem	Fixture Canopies Cat. No.	List Each	Fixture Covers Cat. No.	List Each
3	½	GUA0618	$7.00	GUA0686	$5.50
3	¾	GUA068	7.00	GUA0687	5.50
3	1¼	GUA0684	7.00	----------	-------
5	1¼	GUA098	12.20	----------	-------




In. Diam. Open.	In. Fix. Stem	Nipple Covers Cat. No.	List Each	In. Diam. Open.	Adapters Cat. No.	List Each
2	½	GUA0471	$2.40	3-3⅝	GUA0760	$3.10
3	½	GUA0671	3.10			
3	¾	GUA0672	3.50			

TYPE GUA EXTENSION

For flush mounted GUA and GUF series with 3-inch cover opening to make one or more exposed extensions. Furnished with 3 pipe plugs.



Size	Cat. No.	List Each
½	GUAX166	$4.40
¾	GUAX266	4.40

TYPE EJH JUNCTION CONDULETS

For Pulling In or Splicing Conductors
Explosion-Proof and Dust-Tight

The Condulet body has four bosses located 90° apart around the sides and one boss in the center back. These bosses can be drilled and tapped for ½ inch or ¾ inch conduit.

When ordering include sketch showing location of holes to be drilled and tapped and size desired. Price of Condulet includes drilling and tapping.



Inside Depth	Cat. No.	List Each
With Flat Cover		
2 5/32	EJH50	$16.00
With 2¼-Inch Dome Cover		
4⅜	EJH52	17.60

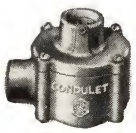


Inside Depth	Cat. No.	List Each
With 1¼-Inch Dome Cover		
3 7/16	EJH51	$16.80
With 3¼-Inch Dome Cover		
5 7/16	EJH53	18.50
With 5-Inch Dome Cover		
7 3/16	EJH55	19.80

CROUSE-HINDS CONDULETS

CPS SERIES JUNCTION CONDULETS

Explosion-Proof and Dust-Tight
Furnished with Hub Cover



Size Hub Condulet	Hub Cover	Form 10 Cat. No.	List Each	Form 20 Cat. No.	List Each
		Dead End			
		CPS-		CPS-	
½	½	10181	$2.80	10281	$4.50
¾	½	20181	2.90	20281	4.60
¾	¾	20182	3.00	20282	4.70
1	½	30181	3.00	30281	4.70
1	¾	30182	3.10	30282	4.80
		Through Feed			
½	½	11181	$3.00	11281	$4.70
¾	½	21181	3.20	21281	4.90
¾	¾	21182	3.30	21282	5.00
1	½	31181	3.40	31281	5.10
1	¾	31182	3.50	31282	5.20
		Type L			
½	½	12181	$3.00	12281	$4.70
¾	½	22181	3.20	22281	4.90
¾	¾	22182	3.30	22282	5.00
1	½	32181	3.40	32281	5.10
1	¾	32182	3.50	32282	5.20
		Type T			
½	½	13181	$3.20	13281	$4.90
¾	½	23181	3.50	23281	5.20
¾	¾	23182	3.60	23282	5.30
1	½	33181	3.80	33281	5.50
1	¾	33182	3.90	33282	5.60
		Type X			
½	½	14181	$3.40	14281	$5.10
¾	½	24181	3.80	24281	5.50
¾	¾	24182	3.90	24282	5.60
1	½	34181	4.30	34281	5.90
1	¾	34182	4.40	34282	6.00

Furnished with Blank Covers



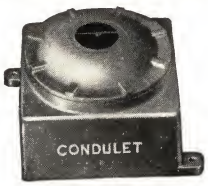
Size Hub	Form 10 Cat. No.	List Each	Form 20 Cat. No.	List Each
	Dead End			
	CPS-		CPS-	
½	10185	$2.50	10286	$4.20
¾	20185	2.60	20286	4.30
1	30185	2.70	30286	4.40
	Through Feed			
½	11185	$2.70	11286	$4.40
¾	21185	2.90	21286	4.60
1	31185	3.10	31286	4.80
	Type L			
½	12185	$2.70	12286	$4.40
¾	22185	2.90	22286	4.60
1	32185	3.10	32286	4.80
	Type T			
½	13185	$2.90	13286	$4.60
¾	23185	3.20	23286	4.90
1	33185	3.50	33286	5.20
	Type X			
½	14185	$3.10	14286	$4.80
¾	24185	3.50	24286	5.20
1	34185	3.90	34286	5.60

If specified on the order, CPS series Condulets will be furnished with fastening lugs at an advance of **$0.20** in the list prices.

Outside dimensions of body, exclusive of hubs: Diameter — Form 10, 3½ inches. Form 20, 4⅝ inches. Depth — Form 10, 2½ inches; Form 20, 2 11/16 inches.

CROUSE-HINDS CONDULETS
UNIVERSAL JUNCTION CONDULETS
Explosion-Proof and Dust-Tight
Types GU, GUE, and GUB

These Condulets can be equipped with threaded or union hubs located as required. When ordering refer to information tables below and furnish a sketch showing the size, location and type of hubs required on each Condulet. Add price of hubs selected to price of Condulet. GU and GUE Condulets take CB1124, four-wire connection block.



Type GUB01



Type GU

Cat. No.	List Each	Overall Dimensions in Inches of Body — Including Cover — Width	Height	Depth	Diam. Cover Opening Inches
GU	$4.00	4⅛	4⅛	3 3/16	3⅝
GUE	5.50	4⅝	4⅝	4⅝	3⅝
GUB01	20.00	6½	7	5⅝	5½
GUB02	37.00	8	10	5⅝	7
GUB06	46.00	8½	10	6⅝	7
GUB03	90.00	11	12	9 5/16	9⅝

Symbol Numbers and Letters for Maximum Size Hubs That Can Be Used

No.	Type of Hub	On Top and Bottom 1	2	3	On Back 1	2
GU	Threaded	4	4	1	4	4
	Union	Y	Y	..	R	Y
GUE	Threaded	6	5	2	4	5
	Union	T	Y	W	R	R
GUB01	Threaded	7	6	4	10	7
	Union	U	S	Y	V	T
GUB02	Threaded	7	7	5	10	9
	Union	U	T	Y	V	V
GUB06	Threaded	8	7	5	10	9
	Union	V	T	Y	V	V
GUB03	Threaded	10	9	6	10	10
	Union	XD	V	S	XD	V

Threaded and Union Hubs

Inches	Threaded Symbol	Each	Union Symbol	Each
½	1	$1.20	W	$2.00
¾	2	1.30	X	2.00
1	3	1.50	Y	2.40
1¼	4	1.80	R	3.50
1½	5	2.30	S	6.00
2	6	3.00	T	8.00
2½	7	4.50	U	11.00
3	8	6.50	V	14.00
3½	9	9.00	WD	18.00
4	10	12.00	XD	22.00

Type GUB Dome Covers

In ordering dome covers for GUB Condulets deduct cost of the flat cover shown in listing below, from cost of complete Condulet selected from listing above — then add cost of the dome cover selected from listing below.

Body Size	Flat Cover No.	Each	Nominal Depth	Dome Cover No.	Each
			2	GUB712	$11.80
GUB01	GUB0101	$6.40	4	GUB714	13.40
			10	GUB7110	18.20
			3	GUB723	18.30
			6	GUB726	22.80
GUB02	GUB0102	$13.00	9	GUB729	27.30
GUB06			12	GUB7212	31.80
			17	GUB7217	39.30
			4	GUB734	22.80
			10	GUB738	33.00
GUB03	GUB0103	$18.60	12	GUB7311	36.40
GUB04			14	GUB7313	39.80
			17	GUB7316	44.90

CROUSE-HINDS CONDULETS
TYPE ESC PULL CONDULETS
For Pulling or Splicing Conductors
Explosion-Proof and Dust-Tight
Class I, Group D; and Classes II and III

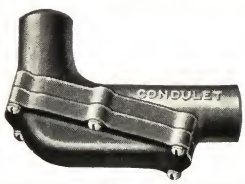


For use in hazardous locations, and designed to afford a convenient opening in the conduit system for pulling or splicing conductors.

The body is cylindrical with a long and wide opening in the front between the threaded end portions.

Cat. No.	List Each	Overall Length, In. — Condulet Pulled Open	Opening Only	Size Hub In.
ESC1	$11.00	15⅞	6	½
ESC2	11.00	15⅞	6	¾
ESC3	20.50	23¾	10	1
ESC4	20.50	23¾	10	1¼
ESC5	39.00	37⅛	16	1½
ESC6	39.00	37⅛	16	2
ESC7	60.00	53 1/16	24	2½
ESC8	60.00	53 1/16	24	3
ESC9	130.00	84⅛	38	3½
ESC10	130.00	84⅛	38	4

TYPE LBH CONDULETS
For Pulling Cables
Explosion-Proof and Dust-Tight



Particularly well suited for pulling large conductors or conductors that are stiff because of their lead sheathing. Especially useful at motor locations. Covers are domed, which provides room for an easy bend in the conductor, thus avoiding undue strain upon the insulation or lead sheath.

Cat. No.	List Each	Cover Opening	Overall Width Inches	Size Hub In.
LBH10	$5.60	4	2¾	½
LBH20	6.00	4	2¾	¾
LBH30	15.40	7	4	1
LBH40	16.00	7	4	1¼
LBH50	23.00	10	5	1½
LBH60	24.00	10	5	2
LBH70	50.00	14	6⅝	2½
LBH80	51.20	14	6⅝	3

TYPE EKC CONDULETS
Explosion-Proof and Dust-Tight
Class I, Group D; Class II, Groups E, F, and G; and Class III EKC30, 40, 50, and 60 are also suitable for Class I, Group C locations

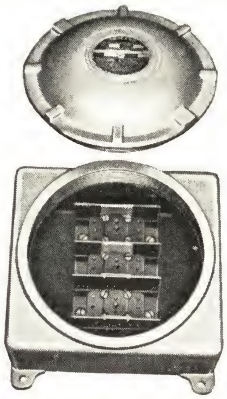


Size Hubs	Cat. No.	List Each
1	EKC30	$15.40
1¼	EKC40	16.00
1½	EKC50	23.00
2	EKC60	24.00
2½	EKC70	50.00
3	EKC80	51.20

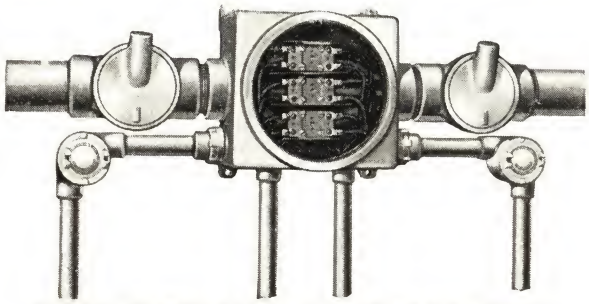
CROUSE-HINDS EJB AND GUB JUNCTION CONDULETS WITH TERMINAL BLOCKS

Explosion-Proof and Dust-Tight

Class I, Group D; Class II, Groups E, F, and G; and Class III

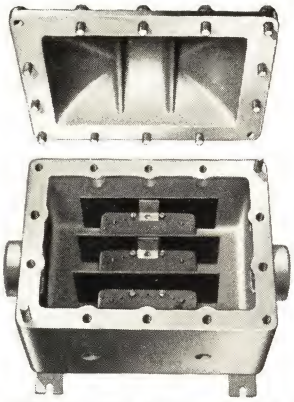


GUB036 and GUB039 Without Hubs Cover Removed Showing Terminal Block



GUB036 with Main and Branch Conduits and Wires in Place for Motor Control Panel Assembly (Motor Controls Not Shown)

Use: The EJB and GUB explosion-proof and dust-tight junction Condulets with terminal blocks provide convenient means for making taps of branch circuits from main feeders.



EJB1184 and EJB1185 with Main Hubs and Branch Tapping; Cover Removed Showing Terminal Block

They are exceptionally useful in making up explosion-proof bus assemblies for groups of motor starters, branch circuit breakers, or combination starters and breakers. One such junction Condulet provides a means of tapping the main feeders to accommodate up to ten branch circuits.

One compact EJB or GUB junction Condulet with terminal block takes the place of one or more large junction boxes at as little as one-third the cost.

Design: These Condulets are standard types EJB and GUB, listed elsewhere in this section, except that they are provided with terminal blocks.

The blocks are equipped with heavy duty cast copper alloy pressure connectors for the main feeders. They are so arranged that the main cables may be pulled through unbroken and need only be skinned where they are clamped between halves of the pressure connectors.

The upper half or top clamp of each main pressure connector is arranged for attachment of standard branch circuit wire lugs.

Basic Condulet	Range of Main Pressure Terminals	Maximum Number per Terminal and Range of Branch Lugs*	Condulet Without Hubs With Terminal Block† Cat. No.	Condulet Without Hubs With Terminal Block† List, each	Terminal Block Only Cat. No.	Terminal Block Only List, each
3-Wire						
GUB06	#4 to #0	Four #4 stranded to #0 or Ten #14 solid to #4 stranded	**GUB061**	**$ 91.00**	**CB220**	**$ 35.00**
	#00 to 250 MCM		**GUB062**	**$ 91.00**	**CB221**	**$ 35.00**
GUB03	#0 to #0000	Two #0 to #0000 or Four #4 stranded to #0 or Ten #14 solid to #4 stranded	**GUB039**	**$130.00**	**CB84**	**$ 50.00**
	250 to 500 MCM		**GUB036**	**$130.00**	**CB86**	**$ 50.00**
EJB12168	#0 to #0000	Two #0 to #0000 or Four #4 stranded to #0 or Ten #14 solid to #4 stranded	**EJB287**	**$230.00**	**CB84**	**$ 50.00**
	250 to 500 MCM		**EJB286**	**$230.00**	**CB86**	**$ 50.00**
	500 to 900 MCM	Four #0 to #0000 or Six #4 stranded to #0 or Ten #14 solid to #4 stranded	**EJB1185**	**$280.00**	**CB343**	**$100.00**
	1000 to 1250 MCM		**EJB1184**	**$280.00**	**CB344**	**$100.00**
4-Wire						
EJB12168	#0 to #0000	Two #0 to #0000 or Four #4 stranded to #0 or Ten #14 solid to #4 stranded	**EJB290**	**$260.00**	**CB81**	**$ 80.00**
	250 to 500 MCM		**EJB289**	**$260.00**	**CB87**	**$ 80.00**

*Standard solder or solderless lugs can be used but these are not included in the list prices of the Condulets. They can be supplied and prices will be quoted on request.

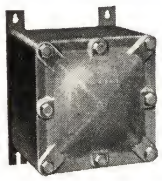
†Furnish sketch showing conduit arrangement required with order. Prices of hubs not included.

CROUSE-HINDS CONDULETS

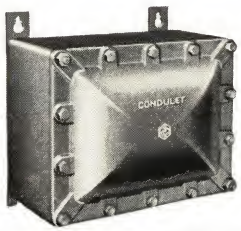
TYPE EJB JUNCTION CONDULETS

Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)

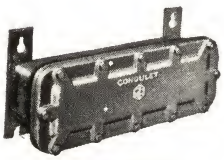
Class I, Group D; Class II, Groups E, F, and G; and Class III



Type EJB886



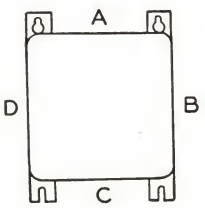
Type EJB12168 and EJB8138



Type EJB4164

Cat. No.	List, Each Without Hubs or Tapping	Size Inside Width	Size Inside Length	Size Inside Depth	Net Weight With Cover
EJB886	**$60.00**	8	8	6	82
EJB4164	**64.00**	4	16	4	68
EJB8138	**125.00**	8	13	8	170
EJB12168	**160.00**	12	16	8	230

Conduit Connection Information



With mounting straps in vertical position, specify the number, size, and location of tapped holes or hubs required in each wall, starting with wall A and continuing clockwise with walls B, C, and D. Tapped holes or brazed hubs will be furnished at the following list prices:

Size Conduit	Tapped Holes	Brazed Hubs	Brazed Union Hubs
½	**$0.40**	**$1.20**	**$2.00**
¾	**.40**	**1.30**	**2.00**
1	**.70**	**1.50**	**2.40**
1¼	**.70**	**1.80**	**3.50**
1½	**1.00**	**2.30**	**6.00**
2	**1.00**	**3.00**	**8.00**
2½	**1.50***	**4.50**	**11.00**
3	**2.00***	**6.50**	**14.00**
3½	**3.00***	**9.00**	**18.00**
4	**4.00***	**12.00**	**22.00**

*Drilled and tapped openings of these sizes can be furnished only on 8x8 ends of the EJB8138.

CROUSE-HINDS CONDULETS

RS SERIES JUNCTION CONDULETS



Take conduit hub plates. Furnished with cast Feraloy cover, screws and gaskets for cover and hub plates.

Type	Approx. Inside Dimen. Inches	Cat. No.	List Each
RS	8½x8½x4	**RS1**	**$18.50**
RSM	8½x4½x4	**RSM1**	**15.70**
RSS	4½x4½x4	**RSS1**	**13.50**

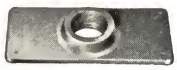
RSP SERIES CONDUIT HUB PLATES

For RS Series Condulets

For 8½x4-Inch Sides of Types RS and RSM Condulets

Approximate outside dimensions, 8 1/16x3½ inches. Cap screws and gaskets furnished with Condulet.

With One Hub



*Size Inches	Cat. No.	List Each
½	**RSP1**	**$2.00**
¾	**RSP2**	**2.10**
1	**RSP3**	**2.20**
1¼	**RSP4**	**2.30**
1½	**RSP5**	**2.40**
2	**RSP6**	**2.50**
2½	**RSP7**	**2.80**
3	**RSP8**	**3.30**
3½	**RSP9**	**3.80**

With Two Hubs



*Size Inches	Cat. No.	List Each
½-½	**RSP11**	**$2.20**
¾-¾	**RSP22**	**2.40**
1-½	**RSP31**	**2.60**
1-1	**RSP33**	**2.60**
1¼-¾	**RSP42**	**2.80**
1¼-1	**RSP43**	**3.00**
1¼-1¼	**RSP44**	**2.80**
1½-¾	**RSP52**	**3.10**
1½-1	**RSP53**	**3.10**
1½-1¼	**RSP54**	**3.10**
1½-1½	**RSP55**	**3.10**
2-¾	**RSP62**	**3.50**
2-1	**RSP63**	**3.50**
2-1¼	**RSP64**	**3.50**
2-1½	**RSP65**	**3.50**
2-2	**RSP66**	**3.50**
2½-1	**RSP73**	**3.90**

With Three Hubs



½-½-½	**RSP111**	**$2.40**
¾-¾-¾	**RSP222**	**2.70**
1-1-½	**RSP331**	**3.00**
1-1-1	**RSP333**	**3.00**
1¼-1¼-¾	**RSP442**	**3.30**
1¼-1¼-1¼	**RSP444**	**3.30**
1½-1½-1	**RSP553**	**3.80**
1½-1½-1½	**RSP555**	**3.80**

Blank



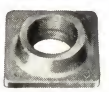
..... **RSP0** **$1.90**

*Sizes are given from left to right in illustrations.

RSMP SERIES CONDUIT HUB PLATES

For 4½x4-Inch Sides of Types RSM and RSS Condulets

Approximate outside dimensions, 3½x3½ inches. Cap screws and gaskets furnished with Condulet.





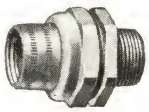


Size In.	Cat. No.	List Each
	With One Hub	
½	**RSMP1**	**$1.00**
¾	**RSMP2**	**1.10**
1	**RSMP3**	**1.20**
1¼	**RSMP4**	**1.30**
1½	**RSMP5**	**1.40**
2	**RSMP6**	**1.50**
2½	**RSMP7**	**1.80**
	With Two Hubs	
½–½	**RSMP11**	**$1.20**
¾–¾	**RSMP22**	**3.40**
	Blank	
.....	**RSMP0**	**$0.90**

CROUSE-HINDS UNIONS, CONNECTORS AND PLUGS

Explosion-Proof and Dust-Tight
Type UNY—Male

For connecting conduit to a Condulet.



Size Inches	Dimens., In. Length	Dimens., In. Diam.	Cat. No.	List Each
½	2 7/16	1 ½	UNY105	$1.00
*¾ to ½	2 ⅛	1 ¾	UNY215	1.45
¾	2 ⅛	1 ¾	UNY205	1.45
1	2 5/16	2 1/16	UNY305	2.50
1 ¼	2 13/16	2 13/16	UNY405	3.90
1 ½	3 ⅛	3 ⅛	UNY505	5.00
2	3 ¼	3 1/16	UNY605	6.40
2 ½	3 ⅞	4 5/16	UNY705	10.10
3	4 7/16	5	UNY805	13.75
3 ½	5	5 ½	UNY905	22.40
4	5	6 7/16	UNY1005	25.60

Type UNF—Female

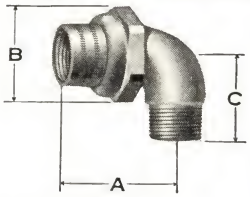
For connecting conduit to conduit.



½	1 ¾	1 ½	UNF105	$0.90
*¾ to ½	1 ¾	1 ¾	UNF215	1.25
¾	1 ¾	1 ¾	UNF205	1.25
1	1 1/16	2 1/16	UNF305	2.30
1 ¼	2	2 13/16	UNF405	3.50
1 ½	2 ⅛	3 ⅛	UNF505	4.55
2	2 ⅛	3 1/16	UNF605	5.95
2 ½	2 ⅞	4 5/16	UNF705	8.20
3	3 7/16	5	UNF805	11.85
3 ½	4	5 ½	UNF905	18.75
4	4	6 7/16	UNF1005	21.95

Type UNL 90° Angle Unions

Explosion-Proof and Dust-Tight



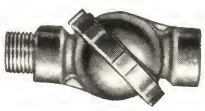
For connecting conduit to a Condulet.

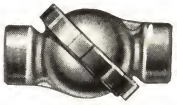
Size Inches	Dimensions, Inches A	B	C	Cat. No.	List Each
*½ to ¾	2 3/16	1 ¾	1 7/8	UNL125	$2.80
*¾ to ½	2 5/16	1 ¾	1 ⅝	UNL215	2.80
¾ to ¾	2 5/16	1 ¾	1 ⅝	UNL205	2.80

*Size of right end is given first.

TYPE UNA CONNECTORS AND UNIONS

A convenient coupling or union for conduit joints made at angles from 90° to 180°. A single clamping nut provides a union feature as well as easy adjustment to required angles.





Box Connectors — Male

For use only if adjacent to a Condulet. Explosion-proof and dust-tight.

Size In.	Dimen., In. Lgth.	Wdth.	Cat. No.	List Each
½	4	2 11/32	UNA16	$4.20
¾	4 ½	2 27/32	UNA26	4.50
1	5 ¼	3 5/32	UNA36	4.80

Universal Unions — Female

½	3 ⅜	2 11/32	UNA1	$3.90
¾	3 ⅞	2 27/32	UNA2	4.20
1	4 ⅝	3 5/32	UNA3	4.50

TYPE PLG PIPE PLUGS



Recessed



Square Head

Cat. No.	List Each	Size In.	Cat. No.	List Each
PLG1	$0.16	½	PLG15	$0.16
PLG2	.20	¾	PLG25	.20
PLG3	.24	1	PLG35	.24
PLG4	.30	1 ¼	PLG45	.30
PLG5	.40	1 ½	PLG55	.40
PLG6	.76	2	PLG65	.76
PLG7	1.20	2 ½	PLG75	1.20
PLG8	1.80	3	PLG85	1.80
.....	.....	3 ½	PLG95	2.40
.....	.....	4	PLG105	3.20

CROUSE-HINDS CONDULETS

TYPE EL CONDULET ELBOWS

Explosion-Proof and Dust-Tight



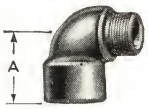
45° Female



90° Male



90° Female



90° Male and Female

Size In.	Dimen. A In.	Cat. No.	List Each
	45° Female		
½	1 3/16	EL1	$0.40
¾	1 5/16	EL2	.50
1	1 9/16	EL3	.70
1 ¼	1 11/16	EL4	1.30
1 ½	2	EL5	1.50
2	2 ¼	EL6	2.40
2 ½	2 ¾	EL7	6.30
3	3	EL8	7.00
3 ½	3 9/16	EL9	9.90
4	3 ¾	EL10	11.10
	90° Male		
½	1 ½	EL195	$1.20
¾	1 ⅝	EL295	1.40
1	1 ⅞	EL395	1.70
1 ¼	2 ⅛	EL495	2.00
	90° Female		
½	1 7/16	EL19	$0.50
¾	1 9/16	EL29	.70
1	1 13/16	EL39	.90
1 ¼	2 1/16	EL49	1.50
1 ½	4	EL59	3.00
2	5	EL69	5.00
2 ½	6 7/16	EL79	9.50
	90° Male and Female		
½	1 ½	EL196	$1.20
¾	1 ⅝	EL296	1.40
1	1 ⅞	EL396	1.70
1 ¼	2 ⅛	EL496	2.00

TYPE EC FLEXIBLE COUPLINGS

Explosion-Proof, Dust-Tight and Watertight

Class I, Group D; and Classes II and III

For use in hazardous locations where it is necessary to employ flexible fittings, as at motor terminals. Provide a safe means of making connections. They are made to withstand explosion pressures and to provide ample mechanical and electrical protection.

Also watertight, and are, therefore, suitable for use in damp locations or under water, such as connections to underwater floodlights and fountain lights.

Type ECJ — Type ECG — Type ECH



Size In.	Two Female Nipples Cat. No.	Overall Length In.	One Female Nipple, One Male Nipple Cat. No.	Overall Length In.	Two Male Nipples Cat. No.	Overall Length In.	List Each
			4 Inches				
	ECJ-		ECG-		ECH-		
½	14	7	14	7	14	7	$9.50
¾	24	7	24	7	24	7	11.40
			10 Inches				
½	110	13	110	13	110	13	12.50
¾	210	13	210	13	210	13	15.60
1	310	14⅞	310	14 11/16	310	14½	27.00
			18 Inches				
½	118	21	118	21	118	21	16.50
¾	218	21	218	21	218	21	21.20
1	318	22⅞	318	22 11/16	318	22½	35.00
1 ¼	418	23½	418	23 5/16	418	23⅛	50.80
1 ½	518	23⅞	518	23⅝	518	23⅜	68.60
2	618	22⅞	618	22⅝	618	22⅜	88.00

CROUSE-HINDS TYPE EC FLEXIBLE COUPLINGS—Continued

Size In.	Cat. No.	Overall Length In.	Cat. No.	Overall Length In.	Cat. No.	Overall Length In.	List Each
	ECJ-		ECG-		ECH-		
27 Inches							
½	127	30	127	30	127	30	$21.00
¾	227	30	227	30	227	30	27.50
1	327	31 7/8	327	31 11/16	327	31 ½	44.00
1¼	427	32 ½	427	32 5/16	427	32 ⅛	62.50
1½	527	32 7/8	527	32 5/8	527	32 ⅜	83.00
2	627	31 7/8	627	31 5/8	627	31 ⅜	106.00
36 Inches							
½	136	39	136	39	136	39	25.50
¾	236	39	236	39	236	39	33.80
1	336	40 7/8	336	40 11/16	336	40 ½	53.00
1¼	436	41 ½	436	41 5/16	436	41 ⅛	74.20
1½	536	41 7/8	536	41 5/8	536	41 ⅜	97.40
2	636	40 7/8	636	40 5/8	636	40 ⅜	124.00

Type ECL



One Female Union, One Female Nipple

Type ECK



One Female Union, One Male Nipple

Size In.	Cat. No.	Overall Length In.	Cat. No.	Overall Length In.	List Each
4 Inches					
½	ECL14	7 21/32	ECK14	7 21/32	$10.30
¾	ECL24	7¾	ECK24	7¾	12.20
10 Inches					
½	ECL110	13 21/32	ECK110	13 21/32	13.30
¾	ECL210	13¾	ECK210	13¾	16.40
1	ECL310	15⅛	ECK310	14 15/16	29.00
18 Inches					
½	ECL118	21 21/32	ECK118	21 21/32	17.30
¾	ECL218	21¾	ECK218	21¾	22.00
1	ECL318	23⅛	ECK318	22 15/16	37.00
1¼	ECL418	23⅞	ECK418	23⅞	53.80
1½	ECL518	24 9/16	ECK518	24¼	72.10
2	ECL618	24⅛	ECK618	23 13/16	95.00
27 Inches					
½	ECL127	30 21/32	ECK127	30 21/32	21.80
¾	ECL227	30¾	ECK227	30¾	28.30
1	ECL327	32⅛	ECK327	31 15/16	46.00
1¼	ECL427	32⅞	ECK427	32⅞	65.50
1½	ECL527	33 9/16	ECK527	33¼	86.50
2	ECL627	33⅛	ECK627	32 13/16	113.00
36 Inches					
½	ECL136	39 21/32	ECK136	39 21/32	26.30
¾	ECL236	39¾	ECK236	39¾	34.60
1	ECL336	41⅛	ECK336	40 15/16	55.00
1¼	ECL436	41⅞	ECK436	41⅞	77.20
1½	ECL536	42 9/16	ECK536	42¼	100.90
2	ECL636	42⅛	ECK636	41 13/16	131.00

Also available in standard lengths of 6, 8, 12, 15, 21, 24, 30, and 33 inches.

CROUSE-HINDS REDUCERS AND CONNECTORS

THREADED CONDULET REDUCERS



Used to reduce Condulet hubs from larger to smaller sizes.

Size In.	Cat. No.	List Per 100	Size In.	Cat. No.	List Per 100
¼– ⅛	RE2818	$30.00	2½–2	RE76	$153.00
⅜– ⅛	RE3818	30.00	3 – ½	RE81	225.00
⅜– ¼	RE3828	30.00	3 – ¾	RE82	225.00
½– ⅛	RE1108	30.00	3 –1	RE83	225.00
½– ¼	RE1208	30.00	3 –1¼	RE84	225.00
½– ⅜	RE1308	21.60	3 –1½	RE85	225.00
¾– ½	RE21	14.25	3 –2	RE86	225.00
1 – ½	RE31	20.00	3 –2½	RE87	225.00
1 – ¾	RE32	20.00	3½– ½	RE91	280.00
1¼– ½	RE41	32.00	3½– ¾	RE92	280.00
1¼– ¾	RE42	32.00	3½–1	RE93	280.00
1¼–1	RE43	32.00	3½–1¼	RE94	280.00
1½– ½	RE51	53.00	3½–1½	RE95	280.00
1½– ¾	RE52	53.00	3½–2	RE96	280.00
1½–1	RE53	53.00	3½–2½	RE97	280.00
1½–1¼	RE54	53.00	3½–3	RE98	280.00
2 – ½	RE61	114.00	4 – ½	RE101	525.00
2 – ¾	RE62	114.00	4 – ¾	RE102	525.00
2 –1	RE63	114.00	4 –1	RE103	525.00
2 –1¼	RE64	114.00	4 –1¼	RE104	525.00
2 –1½	RE65	114.00	4 –1½	RE105	525.00
2½– ½	RE71	153.00	4 –2	RE106	525.00
2½– ¾	RE72	153.00	4 –2½	RE107	525.00
2½–1	RE73	153.00	4 –3	RE108	525.00
2½–1¼	RE74	153.00	4 –3½	RE109	525.00
2½–1½	RE75	153.00	.....	.....	.....

TYPE CGB CONNECTORS
Straight—Male Thread

The smaller sizes of connectors are made of steel; larger sizes, of cast Feraloy.



With Tapered Rubber Bushing—Watertight

*Schedule 1

For connecting round flexible cord or cable to Condulets, outlet boxes, plug handles, or rigid conduit. Cord or cable will pass entirely through the connector without removing outer covering.

Cat. No.	List Each	Dimensions, Inches †A	§B	‖C
CGB3892	$1.30	.125 to .250	⅜	15/32
CGB192	1.30	.125 to .250	½	19/32
CGB292	1.30	.125 to .250	¾	11/16
CGB3893	1.30	.250 to .375	⅜	15/32
CGB193	1.30	.250 to .375	½	19/32
CGB293	1.30	.250 to .375	¾	11/16
CGB194	1.30	.375 to .500	½	19/32
CGB294	1.30	.375 to .500	¾	11/16
CGB295	1.30	.500 to .625	¾	11/16
CGB395	2.00	.500 to .625	1	15/16
CGB396	2.00	.625 to .750	1	15/16

*Schedule 2

For connecting round flexible cord or cable to Condulets, outlet boxes, or rigid conduit. Cord or cable will not pass through the connector without removing outer covering.

CGB195	$1.30	.500 to .625	½	½
CGB196	2.00	.625 to .750	½	½
CGB296	2.00	.625 to .750	¾	11/16
CGB297	2.00	.750 to .875	¾	11/16
CGB398	2.90	.875 to 1.000	1	29/32

*Use schedule numbers for identification of connectors when consulting Underwriters' Laboratories' list of inspected electrical appliances.

†A—Inside diameter in inches of rubber bushing which takes round flexible cord or cable.

§B—Size in inches of Condulet hub with which connectors can be used.

‖C—Inside diameter of hole through nipple of connectors.

CROUSE-HINDS CONNECTORS

TYPE CGB CONNECTORS

With Tapered Split Lead Sleeves

***Schedule 3**

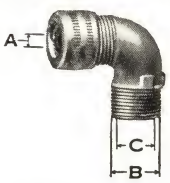
For connecting armored cable or flexible conduit to Condulets, outlet boxes, plug handles, or rigid conduit. Armored cable or flexible conduit will pass entirely through the connector.

Cat. No.	List Each	Dimensions, Inches †A	§B	‖C
CGB184	$1.30	.375 to .500	½	19/32
CGB185	1.30	.500 to .563	½	19/32
CGB285	1.30	.500 to .625	¾	11/16
CGB386	2.00	.625 to .781	1	15/16
CGB387	2.00	.781 to .938	1	15/16
CGB489	2.90	.938 to 1.156	1¼	1 7/32
CGB589	2.90	.938 to 1.156	1½	1 7/16

***Schedule 4**

For connecting armored cable or flexible conduit to Condulets, outlet boxes, plug handles, or rigid conduit. Armored cable or flexible conduit will not pass through the connector without removing outer covering.

CGB186	$2.00	.625 to .781	½	½
CGB286	2.00	.625 to .781	¾	11/16
CGB187	2.00	.781 to .938	½	½
CGB287	2.00	.781 to .938	¾	11/16
CGB289	2.90	.938 to 1.156	¾	11/16
CGB389	2.90	.938 to 1.156	1	29/32



TYPE CGE CONNECTORS

90° Angle—Male Thread

With Tapered Rubber Bushing—Watertight

The smaller sizes of connectors are made of steel; larger sizes of cast Feraloy.

***Schedule 1**

For connecting round flexible cord or cable to Condulets, outlet boxes, plug handles, or rigid conduit. Cord or cable will pass entirely through the connector without removing outer covering.

Cat. No.	List Each	Dimensions, Inches †A	§B	‖C
CGE192	$1.30	.125 to .250	½	½
CGE292	1.30	.125 to .250	¾	11/16
CGE193	1.30	.250 to .375	½	½
CGE293	1.30	.250 to .375	¾	11/16
CGE194	1.30	.375 to .438	½	½
CGE294	1.30	.375 to .500	¾	11/16
CGE295	1.30	.500 to .625	¾	11/16
CGE395	2.00	.500 to .625	1	29/32
CGE396	2.00	.625 to .750	1	29/32
CGE397	2.00	.750 to .813	1	29/32
CGE498	2.90	.875 to 1.000	1¼	1 7/32

***Schedule 2**

For connecting round flexible cord or cable to Condulets, outlet boxes, or rigid conduit. Cord or cable will not pass through the connector without removing outer covering.

CGE195	$1.30	.500 to .625	½	½
CGE196	2.00	.625 to .750	½	½
CGE296	2.00	.625 to .750	¾	11/16
CGE197	2.00	.750 to .875	½	½
CGE297	2.00	.750 to .875	¾	11/16
CGE397	2.00	.813 to .875	1	29/32
CGE398	2.90	.875 to 1.000	1	29/32

*Use schedule numbers for identification of connectors when consulting Underwriters' Laboratories' list of inspected electrical appliances. †A—Inside diameter in inches of rubber bushing which takes round flexible cord or cable. ‡A—Inside diameter in inches of split lead sleeve which takes armored cable or flexible conduit. §B—Size in inches of Condulet hub with which connectors can be used. ‖C—Inside diameter of hole through nipple of connectors.

CROUSE-HINDS CONDULETS



THREADLESS CONDULET REDUCERS

For Threadless Condulets

Size Inches	Thick Wall No.	Thick Wall Per 100	Thin Wall EMT* No.	Thin Wall EMT* Per 100
¾– ½	RE291	$58.00	RE251	$58.00
1 – ½	RE391	76.00	RE351	76.00
1 – ¾	RE392	86.00	RE352	86.00
1¼– ½	RE491	102.00	RE451	102.00
1¼– ¾	RE492	108.00	RE452	108.00
1¼–1	RE493	116.00	RE453	116.00
1½– ½	RE591	114.00	RE551	114.00
1½– ¾	RE592	128.00	RE552	128.00
1½–1	RE593	134.00	RE553	134.00
1½–1¼	RE594	162.00	RE554	162.00
2 – ½	RE691	150.00	RE651	150.00
2 – ¾	RE692	170.00	RE652	170.00
2 –1	RE693	184.00	RE653	184.00
2 –1¼	RE694	204.00	RE654	204.00
2 –1½	RE695	216.00	RE655	216.00

*External threaded portion has a fine thread to fit EMT Condulets only.

Certain sizes of thin wall reducers for old style Condulets with external clamping nut can be furnished.

TYPE EYS SEALING CONDULETS

Explosion-Proof

For Sealing Vertical Runs of Conduit

Female Hub Top and Bottom



Size In.	Lgth.	Turning Radius	Internal Volumes Cu. In.	Cat. No.	List Each
½	3 9/32	1⅝	1	EYS1	$1.30
¾	3 11/32	1 29/32	1¾	EYS2	1.60
1	4 5/16	2⅜	4	EYS3	2.10
1¼	5 1/16	2 33/32	6½	EYS4	2.60
1½	5½	2 1/16	8½	EYS5	3.90
2	6¼	2 5/16	18	EYS6	5.10
2½	7½	2 11/16	30	EYS7	8.00
3	8½	3 5/16	64	EYS8	10.00

Male and Female Hub*



½	3 9/32	1⅝	1	EYS16	1.30
¾	3 11/32	1 29/32	1¾	EYS26	1.60
1	4 5/16	2⅜	4	EYS36	2.10
1¼	5 1/16	2 33/32	6½	EYS46	2.60
1½	5½	2 1/16	8½	EYS56	3.90
2	6¼	2 5/16	18	EYS66	5.10
2½	7½	2 11/16	30	EYS76	8.00
3	8½	3 5/16	64	EYS86	10.00

TYPE EZS SEALING CONDULETS

Explosion-Proof

For Sealing Vertical or Horizontal Runs of Conduit

Condulets have round cover openings and provide ample room for placing dams around and between conductors, preparatory to sealing.

Female Hub Top and Bottom



Size In.	Lgth.	Turning Radius†	Internal Volumes Cu. In.	Cat. No.	List Each
½	4 3/16	1¾	5½	EZS1	$2.30
¾	4 3/16	1¾	6	EZS2	2.90
1	4 15/16	2 1/16	9	EZS3	3.70
1¼	5 1/16	2 3/16	12½	EZS4	4.70
1½	5 1/16	2¼	14	EZS5	7.00
2	7 1/16	3 3/16	46	EZS6	9.20
2½	7 13/16	3⅜	55	EZS7	14.80
3	8⅝	3¾	88	EZS8	21.40

Male and Female Hub*



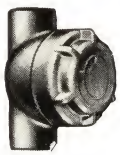
½	4 3/16	1¾	5½	EZS16	2.30
¾	4 3/16	1¾	6	EZS26	2.90
1	4 15/16	2 1/16	9	EZS36	3.70
1¼	5 1/16	2 3/16	12½	EZS46	4.70
1½	5 1/16	2¼	14	EZS56	7.00
2	7 1/16	3 3/16	46	EZS66	9.20
2½	7 13/16	3⅜	55	EZS76	14.80
3	8⅝	3¾	88	EZS86	21.40

*The male and female hub listings include a close conduit nipple which may be used interchangeably in either top or bottom hub. †With cover removed.

CROUSE-HINDS CONDULETS
TYPE EZD INSPECTION AND DRAIN SEALING CONDULETS
Explosion-Proof
For Sealing Vertical Runs of Conduit

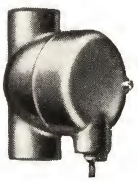
The National Electrical Code requires that conduit systems in Class I Hazardous Locations be provided with means by which the systems can be drained of water, if there is a likelihood of water accumulation.

Type EZD Drain Seals and EZD Inspection Seals listed below make compliance with this rule simple and inexpensive.



Inspection Seal Condulets

Size In.	Lgth.	Turning Radius†	Internal Volume	Cat. No.	List Each
½	4 3/16	2 1/16	5	EZD10	$2.70
¾	4 3/16	2 3/16	6	EZD20	3.40
1	4 1/8	2 1/16	10	EZD30	4.40
1¼	4 1/8	2 9/16	11	EZD40	5.50
1½	5 3/16	2 11/16	13	EZD50	8.20
2	7⅛	3 11/16	40	EZD60	10.80
2½	8	3 7/8	50	EZD70	13.00



Drain Seal Condulets

½	4 3/16	2 1/16	5	EZD111	5.70
¾	4 3/16	2 3/16	6	EZD211	6.40
1	4 1/8	2 7/16	10	EZD311	7.40
1¼	4 1/8	2 9/16	11	EZD411	8.50
1½	5 3/16	2 11/16	13	EZD511	11.20
2	7⅛	3 11/16	40	EZD611	13.80
2½	8	3 7/8	50	EZD711	16.00

†With cover removed.

CHICO A SEALING COMPOUND
Not Affected by Gasoline, Alcohol, Acetone, Ether, Naphtha, Petroleum, Benzol, or Lacquer Solvent

Pkg. No.	Net Wt.	Volume Cu. In.*	Cat. No.	List per Pkg.
2	9 oz.	13	Chico A 2	$0.80
3	1 lb.	23	Chico A 3	1.30
4	†1 lb.	23	Chico A 4	2.00
23	2 lb.	46	Chico A 23	2.20
24	‡2 lb.	46	Chico A 24	3.80
05	5 lb.	115	Chico A 05	3.60
5	10 lb.	230	Chico A 55	7.20



CHICO X FIBER



Pkg. No.	Net Wt. Oz.	Cat. No.	List per Pkg.
1	⅜ oz.	Chico X 1	$0.50
2	¾ oz.	Chico X 2	.80
3	1 oz.	Chico X 3	1.00
4	2 oz.	Chico X 4	1.80
5	4 oz.	Chico X 5	3.40
6	8 oz.	Chico X 6	5.80
7	1 lb.	Chico X 7	9.60

Approx. Amount of Fiber Required per Condulet Hub

Hub in.	½	¾	1	1¼	1½	2	2½	3
Oz. Req.	1/32	1/16	⅛	¼	½	1	1½	2

*Number of cubic inches volume this amount fills when set. †With ¾-ounce Chico X Fiber. ‡With 2-ounce Chico X Fiber.

TYPE ECD DRAIN AND BREATHER VALVES
Explosion-Proof—Class I, Groups C and D

The ECD breather valve is similar to the ECD drain but is designed to be installed in the top of explosion-proof housings, allowing air to pass in or out as conditions vary.



ECD Drain



ECD Breather

The labyrinth handle is a rotating cap to prevent dirt from interfering with the action of the valve.

For Water Only No.	For Water Under Oil No.	For Air Only No.	Size Pipe Thread	List Each
ECD281	ECD282	ECD283	¼	$3.30
ECD381	ECD382	ECD383	⅜	3.30
ECD11	ECD12	ECD13	½	3.30

CROUSE-HINDS LIGHTING FIXTURES
EV SERIES
Explosion-Proof
Class I, Groups C and D

Hoods are cast aluminum with etched alzak aluminum inner reflectors. Globe holder assembly consists of clear, heat-resisting, impact-resisting, glass globe, equipped with sheet aluminum gasket and cast aluminum mounting and retaining rings. Cast aluminum guards are held to globe mounting rings by machine screws. Furnished without reflectors.

Type EVA—Pendent Type

Complete with a Condulet body for pendent mounting on a conduit stem. A set screw in hub may be tightened against unthreaded part of conduit to prevent unscrewing from conduit when relamping. May be suspended by a conduit stem from GUA or GUF series Condulets with three-inch cover opening and GUA fixture covers or canopies.



Watts	Size In.	With Guard No.	With Guard Each	Without Guard No.	Without Guard Each
		EVA-		EVA-	
75	½	140	$19.75	104	$18.60
	¾	240	19.90	204	18.75
†100	½	110	29.50	101	27.95
	¾	210	29.65	201	28.10
150	½	115	29.50	105	27.95
	¾	215	29.65	205	28.10
‡200/300	½	120	42.40	102	40.15
	¾	220	42.55	202	40.30
300*	¾	230	69.95	203	65.35
500*	1¼	450	137.25	406	130.70

Type EVCX—Ceiling Type

Has four threaded hubs, three of which are furnished with pipe plugs.



Watts	Size In.	EVCX- No.	EVCX- Each	EVCX- No.	EVCX- Each
75	½	140	$26.15	104	$25.00
	¾	240	26.60	204	25.45
†100	½	110	36.05	101	34.50
	¾	210	36.50	201	34.95
150	½	115	36.05	105	34.50
	¾	215	36.50	205	34.95
‡200/300	½	120	48.95	102	46.70
	¾	220	49.40	202	47.15
300*	½	136	76.75	163	72.15
	¾	236	77.20	263	72.60
500*	½	150	144.10	106	137.55
	¾	250	144.55	206	138.00

Type EVBX—Bracket Type



Four hubs tapped for rigid conduit are provided, three of which are equipped with threaded pipe plugs.

Watts	Size In.	EVBX- No.	EVBX- Each	EVBX- No.	EVBX- Each
75	½	140	$29.20	104	$28.05
	¾	240	29.65	204	28.50
†100	½	110	39.05	101	37.50
	¾	210	39.50	201	37.95
150	½	115	39.05	105	37.50
	¾	215	39.50	205	37.95
‡*200/300	½	120	52.00	102	49.75
	¾	220	52.45	202	50.20

‡300-watt type PS30 lamp only. Fixtures equipped with deep bowl or 30° angle reflectors are listed for Class I, Group D locations only.

*Take deep bowl and 30° angle reflectors only.

†These lighting units are designed for the A-21 standard lamp and cannot be used with 100-watt A-23 lamp. Should there be a requirement for the A-23 100-watt lamp, add Suffix S261 to catalog number. There will be no extra charge for the lighting fixture arranged in this manner.

*Equipped with mogul base lamp receptacle; all others equipped with medium base lamp receptacle.

Also available in polished aluminum finish for hospital use. Prices on request.

CROUSE-HINDS LIGHTING FIXTURES

REFLECTORS FOR EV SERIES LIGHTING FIXTURES


Dome


Deep


Shallow

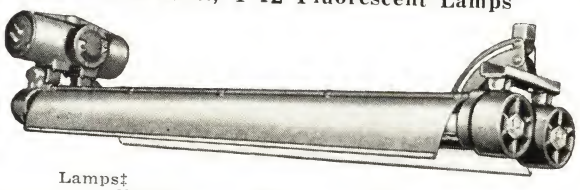

30° Angle

Reflectors are porcelain enameled steel, green outside and white inside. Also available in all white enamel for hospital use.

Fixture Watts	Diam. In.	Cat. No. EV-	List Each	Style	Fixture Watts	Diam. In.	Cat. No. EV-	List Each
75	10¼	481	$3.80	Dome	150	13¾	581	$4.95
	8¼	483	4.20	Deep		10¼	583	5.30
	10¼	485	3.45	Shallow		13¾	585	4.55
	8¼	487	4.20	30° Angle		12⅛	587	5.30
100	12⅛	181	4.20	Dome	200/300	16⅛	281	5.70
	9¼	183	4.55	Deep		12⅛	283	6.10
	12⅛	185	3.80	Shallow		16⅛	285	6.30
	10¼	187	4.55	30° Angle		13¾	287	6.85
300	20⅞	381	9.90	Dome	500	20½	681	9.90
	16⅛	383	10.25	Deep				
	20½	385	9.50	Shallow				
	16⅛	387	6.85	30° Angle				

TYPE EVF INDUSTRIAL LIGHTING FIXTURE

For Fluorescent Lamps
Explosion-Proof and Dust-Tight
Class I, Groups C and D; Class II, Groups E, F, and G; and Class III
Furnished with Enameled Reflector, Standard Ballast, and Starter
For 40-Watt, T-12 Fluorescent Lamps



Lamps‡ Number	Volts at 60 Cycles	Size Hub	Cat. No.	List Each
1	110-125	½†	EVF114	$190.00
		¾	EVF214	190.00
	220-250	½†	EVF1142	190.00
		¾	EVF2142	190.00
2	110-125	½†	EVF124	243.20
		¾	EVF224	243.20
	220-250	½†	EVF1242	243.20
		¾	EVF2242	243.20
3	110-125	½†	EVF134	364.80
		¾	EVF234	364.80
	220-250	½†	EVF1342	364.80
		¾	EVF2342	364.80
4	110-125	½†	EVF144	471.20
		¾	EVF244	471.20
	220-250	½†	EVF1442	471.20
		¾	EVF2442	471.20

Type EVF Accessories

Ceiling Saddle for Conduit Support



Size	Cat. No.	List Each
¾	EVF20	$1.00

Ceiling Saddle for Support Hook



Cat. No.	List Each
EVF021	$1.00

Support Hook for Conduit



Cat. No.	List Each
EVF21	$0.70

†½-inch hub at ballast end only. ¾-inch hub at relamping end.

‡Lamps are not included in the list price.

CROUSE-HINDS LIGHTING FIXTURES

TYPE EVH EXPLOSION-PROOF HAND LAMPS

Class I, Group D




Globe with Holder


Guard

Furnished with lamp receptacle, globe, and guard. Designed and constructed to provide the utmost safety, durability, and ease of wiring.

Non-sparking metals are used. Laminated bakelite handle is firmly secured to the cast aluminum body, in which is mounted a keyless, composition lamp receptacle.

75-Watt, Takes 25, 40, 60, or 75-Watt A19 Lamps

No.	Description	Each
EVH40	EVH Hand Lamp	$33.45
EVH4	Clear Globe with Holder	12.60
	Cost of New Globe Installed in Customer's Holder†	6.55
EVH084	Guard	4.20

100-Watt††, Takes 75 or 100 Watt A21 or 100-Watt A23 Lamps

EVH110	EVH Hand Lamp	$54.70
EVH4	Clear Globe with Holder	12.60
	Cost of New Globe Installed in Customer's Holder†	6.55
EVH084	Guard	4.20

TYPE EVS PORTABLE LAMPS

Class I, Groups C and D



Furnished with lamp receptacle, globe, and guard. Same construction as the type EVA fixtures, with a handle assembly added.

Handle assembly includes a hook and cable clamp. A third terminal is provided in type EVS for connection to a third wire in the portable cord for grounding the non-current-carrying metal parts of the unit.

Diameter of cable, .250 to .625 inch.


Globe with Holder

No. of Watts	Portable Lamps No.	Portable Lamps Each	†Globes and Holders No.	†Globes and Holders Each	Replacement Cost
100	EVS80	$41.05	EV710	$18.25	$8.35
150	EVS81	41.05	EV715	18.25	8.35
200	EVS82	54.70	EV720	30.40	15.20

†Globes must be assembled in the threaded holder at the factory. Used holder assemblies, when sent to the factory accompanied by a repair and return order, will be fitted with new globes at the list prices indicated above. The holders must not be damaged to such an extent that an explosion-proof assembly cannot be made.

††The EVH100, formerly listed on this page, can still be furnished where required by government specifications or where needed for match-up and replacement. Price on application.

The EVH40 is also suitable for Class II, Group G locations when used with 25 or 40-watt lamps.

CROUSE-HINDS LIGHTING FIXTURES
DL SERIES LIGHTING FIXTURE CONDULETS
Dust-Tight

For Class II, Group G Hazardous Locations When Mounted Vertically

For Class III Hazardous Locations When Mounted in Any Position

Bodies and hoods of cast aluminum.

Type DLA pendent type fixtures may be suspended from CPS series Condulets with hub covers.

Type DLC ceiling type is made to mount directly on CPS series Condulets.



Type DLA Pendent Type

With Shock-Absorbing Lamp Receptacle V46 and Globe

100-Watt Lamps

Size In.	Cat. No. DLA-	List Each	Cat. No. DLC-	List Each
½	101	$14.75	50F	$14.75
¾	201	14.75	.....	.....
150 and 200-Watt Lamps				
½	121	$17.25	20F	$17.25
¾	221	17.25	.....	.....



Type DLC Ceiling Type

With Porcelain Enameled Steel Reflector

Reflector is green porcelain enamel outside; and white porcelain enamel inside.



Type DLA (Dome) Pendent Type



Type DLC (Dome) Ceiling Type

100-Watt Lamps

Cat. No. DLA-	List Each	Reflector No. DL-	Reflector Dia. In.	Size Hub In.	Cat. No. DLC-	List Each	Reflector No. DL-	Reflector Dia. In.
1020	$17.50	23	12	½	720F	$17.50	23	12
2020	17.50	23	12	¾	.....	.....	....	....
150 or 200-Watt Lamps					**150 or 200-Watt Lamps**			
1022	$25.05	24	18	½	.....	.....	....	....
2022	25.05	24	18	¾	722F	$25.05	24	18

Type DLA

Dust-Tight and Weather Resistant (Raintight) Class II, Groups E, F, and G; and Class III

For use in Class II hazardous locations where a simple yet sturdy fixture without reflector is required. Also suitable where a raintight unit is needed.

Form 100 takes 60, 75, and 100-W. lamps. Furnished with V105 globe.

Form 200 takes 150 and 200-W. lamps. Furnished with V205 globe.

Fixtures with heat-resisting globes can be furnished. Prices on application.

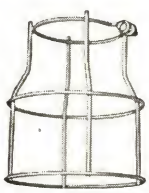
Condulet with Globe



Condulet with Globe and Guard



Guard



Form	Cat. No.	List Each	Cat. No.	List Each	Cat. No.	List Each
100	DLA110	$4.55	DLA119	$6.05	DL103	$1.50
200	DLA120	6.60	DLA128	9.05	DL222	2.45

CROUSE-HINDS LIGHTING FIXTURES
CPS SERIES JUNCTION CONDULETS
Dust-Tight and Weather Resistant (Raintight)*

Class II, Groups E, F, and G; and Class III

Take Hub Covers and DL Series Lighting Fixtures

Outside Dimensions of Body, exclusive of hubs: Diameter, 4⅝ inches. Depth, 1⅞ inches.

Dead End



Through Feed



Form 20—Without Mounting Feet‡

Size Hub	Cat. No.	List Each	Cat. No.	List Each
½	CPS1028	$2.50	CPS1128	$2.70
¾	CPS2028	2.60	CPS2128	2.90
1	CPS3028	2.70	CPS3128	3.10

Type L



Type X



½	CPS1228	$2.70	CPS1428	$3.10
¾	CPS2228	2.90	CPS2428	3.50
1	CPS3228	3.10	CPS3428	3.90

Covers

For CPS Series Condulets—Form 20



Size Hub	Cat. No.	List Each
½	DL1	$2.00
¾	DL2	2.10

TYPE ELG GAUGE LIGHTING FIXTURES
Explosion-Proof

For Medium Screw Base, Lumiline, and Fluorescent Lamps

Class I, Group D



Style 1 One-Light, With Hood



Style 1 Two-Light With Hood



Style 2 and Style 3 With Hood

Style	No. of L'ps	Hub Size	Less Hood—No.	Less Hood—Each	With Hood—No.	With Hood—Each
Takes Medium Screw Base Incandescent Lamps 25-Watt, T10-Bulb						
1	1	½	ELG1250	$33.50	ELG125	$35.50
1	1	¾	ELG2250	33.70	ELG225	35.70
1	2	½	ELG1500	55.50	ELG150	59.50
1	2	¾	ELG2500	55.70	ELG250	59.70
Takes 18-Inch Incandescent Lumiline Lamp 60-Watt, T8-Bulb						
2	1	½	ELG1060	$73.50	ELG106	$79.00
2	1	¾	ELG2060	73.70	ELG206	79.20
Takes 18-Inch Fluorescent Lamp—15-Watt, T8-Bulb Complete with Ballast and Starter						
3	1	½	ELG1150	$86.50	ELG115	$92.00
3	1	¾	ELG2150	86.70	ELG215	92.20

‡CPS series Condulets will be furnished with mounting feet at an advance of **$0.20** in the list price. *When assembled with DLC series lighting fixtures or hub covers. †Lamps are not included in the list price. Form 20 indicates size of Condulet which takes covers correspondingly classified.

CROUSE-HINDS VAPORTIGHT INDUSTRIAL LIGHTING FIXTURES

V AND VH SERIES—CLAMP GUARD TYPE

Cast aluminum guards. Cast Feraloy fixtures.

Form 100 is furnished with No. V75 globe and No. V97 guard, and takes 50, 60, 75, or 100-watt lamps.

Form 200 is furnished with No. V200 globe and No. VH99 guard, and takes 150 or 200-watt lamps.



Types V and VH

Type V
Form 100

Size In.	With Globe and Guard — No.	Each	Without Globe and Guard — No.	Each
½	V189	$9.00	V1	$3.80
¾	V289	9.10	V2	3.90
1	V389	9.20	V3	4.00

Type VH
Form 200

½	VH189	$10.80	VH1	$4.70
¾	VH289	10.90	VH2	4.80
1	VH389	11.00	VH3	4.90



Types VC and VHC

Type VC
Form 100

½	VC1189	$9.20	VC11	$4.00
¾	VC2289	9.40	VC22	4.20
1	VC3389	9.60	VC33	4.40

Type VHC
Form 200

½	VHC1189	$11.00	VHC11	$4.90
¾	VHC2289	11.20	VHC22	5.10
1	VHC3389	11.30	VHC33	5.20



Types VL and VHL

Type VL
Form 100

½	VL1189	$9.20	VL11	$4.00
¾	VL2289	9.40	VL22	4.20
1	VL3389	9.60	VL33	4.40

Type VHL
Form 200

½	VHL1189	$11.00	VHL11	$4.90
¾	VHL2289	11.20	VHL22	5.10
1	VHL3389	11.30	VHL33	5.20



Types VT and VHT

Type VT
Form 100

½	VT11189	$9.50	VT111	$4.30
¾	VT22289	9.70	VT222	4.50
1	VT33389	10.10	VT333	4.90

Type VHT
Form 200

½	VHT11189	$11.20	VHT111	$5.10
¾	VHT22289	11.50	VHT222	5.40
1	VHT33389	11.70	VHT333	5.60



Types VDA and VHDA

Type VDA
Form 100

½	VDA189	$9.00	VDA1	$3.80
¾	VDA289	9.10	VDA2	3.90
1	VDA389	9.20	VDA3	4.00

Type VHDA
Form 200

½	VHDA189	$10.80	VHDA1	$4.70
¾	VHDA289	10.90	VHDA2	4.80
1	VHDA389	11.00	VHDA3	4.90

Forms 100 and 200 indicate sizes of fixtures. Accessories and parts are correspondingly classified.

If specified on the order, lamp receptacle with lamp grip will be furnished at an advance of 20 cents in the list price.

If specified on the order, pigtail receptacle will be furnished at an advance of 90 cents in the list price.

These fixtures can be equipped with externally operated switch at an advance of $2.00 in the list price.

CROUSE-HINDS VAPORTIGHT INDUSTRIAL LIGHTING FIXTURES

V AND VH SERIES—CLAMP GUARD TYPE



Types VJ and VHJ

Type VJ
Form 100

Size In.	With Globe and Guard — Cat. No.	List Each	Without Globe and Guard — Cat. No.	List Each
½	VJ1189	$10.30	VJ11	$5.10
¾	VJ2289	10.50	VJ22	5.30
1	VJ3389	10.70	VJ33	5.50

Type VHJ
Form 200

½	VHJ1189	$11.80	VHJ11	$5.70
¾	VHJ2289	12.00	VHJ22	5.90
1	VHJ3389	12.20	VHJ33	6.10



Types VG and VHG

Type VG
Form 100

½	VG189	$9.50	VG1	$4.30
¾	VG289	9.70	VG2	4.50

Type VHG
Form 200

½	VHG189	$11.00	VHG1	$4.90
¾	VHG289	11.20	VHG2	5.10



Types VE and VHE

Type VE
Form 100

½	VE189	$9.50	VE1	$4.30
¾	VE289	9.70	VE2	4.50
1	VE389	9.90	VE3	4.70

Type VHE
Form 200

½	VHE189	$11.00	VHE1	$4.90
¾	VHE289	11.20	VHE2	5.10
1	VHE389	11.40	VHE3	5.30

ACCESSORIES AND PARTS

For V and VH Series Fixtures, Clamp Guard Type

GLOBES



Globe	Form 100 — 5⅝ In. Long No.	Each	6¾ In. Long No.	Each	Form 200 — 9¼ In. Long No.	Each
Clear	V18	$1.60	V75	$1.60	V200	$1.60
Opal	VN81	3.40	VN71	3.40	VO201	4.70
Green	VN82	3.40	VN72	3.40	VO202	4.70
Blue	VN83	3.40	VN73	3.40	VO203	4.70
Red	VN85	3.40	VN75	3.40	VO205	4.70
Amber	VN86	3.40	VN76	3.40	VO206	4.70
	Prismatic Diffusing Globes					
Clear	.....	.....	V103	$1.60	.....	.....
	Heat-Resisting Globes					
Clear	V183	$2.50	V63	$2.50	V93	$4.00



Pear-Shaped Globes

Clear globes. Cannot be used with straight guards.

Cat. No.	List Each	Lamp Size Watts
	Form 100	
V105	$1.60	50, 60, 75, 100
	Form 200	
V205	$1.60	150
V205	1.60	200

VAPORTIGHT INDUSTRIAL LIGHTING FIXTURES

V SERIES—SCREW GUARD TYPE


Type V

Form 100 is furnished with No. V75 globe and No. V911 guard, and takes 50, 60, 75, or 100-watt lamps.

Form 200 furnished with No. V200 globe and No. V912 guard, takes 150 or 200-watt lamps.

Cast aluminum guards; cast Feraloy fixtures.

Type V

Form 100

Size In.	With Globe and Guard No.	Each	Without Globe and Guard No.	Each
½	V1759	$9.00	V175	$3.80
¾	V2759	9.10	V275	3.90
1	V3759	9.20	V375	4.00

Form 200

½	V12009	$10.80	V1200	$4.70
¾	V22009	10.90	V2200	4.80
1	V32009	11.00	V3200	4.90


Type VC

Type VC

Form 100

½	VC1759	$9.20	VC175	$4.00
¾	VC2759	9.40	VC275	4.20
1	VC3759	9.60	VC375	4.40

Form 200

½	VC12009	$11.00	VC1200	$4.90
¾	VC22009	11.20	VC2200	5.10
1	VC32009	11.30	VC3200	5.20


Type VL

Type VL

Form 100

½	VL1759	$9.20	VL175	$4.00
¾	VL2759	9.40	VL275	4.20
1	VL3759	9.60	VL375	4.40

Form 200

½	VL12009	$11.00	VL1200	$4.90
¾	VL22009	11.20	VL2200	5.10
1	VL32009	11.30	VL3200	5.20


Type VT

Type VT

Form 100

½	VT1759	$9.50	VT175	$4.30
¾	VT2759	9.70	VT275	4.50
1	VT3759	10.10	VT375	4.90

Form 200

½	VT12009	$11.20	VT1200	$5.10
¾	VT22009	11.50	VT2200	5.40
1	VT32009	11.70	VT3200	5.60


Type VX

Type VX

Form 100

½	VX1759	$9.70	VX175	$4.50
¾	VX2759	10.10	VX275	4.90
1	VX3759	10.40	VX375	5.20

Form 200

½	VX12009	$11.40	VX1200	$5.30
¾	VX22009	11.80	VX2200	5.70
1	VX32009	12.10	VX3200	6.00


Type VDA

Type VDA

Form 100

½	VDA1759	$9.00	VDA175	$3.80
¾	VDA2759	9.10	VDA275	3.90
1	VDA3759	9.20	VDA375	4.00

Form 200

½	VDA12009	10.80	VDA1200	4.70
¾	VDA22009	10.90	VDA2200	4.80
1	VDA32009	11.00	VDA3200	4.90

Forms 100 and 200 indicate sizes of fixtures. Accessories and parts are correspondingly classified.

If specified on the order, lamp receptacle with lamp grip will be furnished at an advance of **20** cents in the list price.

If specified on the order, pigtail receptacle will be furnished at an advance of **90** cents in the list price.

These fixtures can be equipped with externally operated switch at an advance of **$2.00** in the list price.

VAPORTIGHT INDUSTRIAL LIGHTING FIXTURES

V SERIES—SCREW GUARD TYPE


Type VJ

Type VJ

Form 100

Size In.	With Globe and Guard No.	Each	Without Globe and Guard No.	Each
½	VJ1759	$10.30	VJ175	$5.10
¾	VJ2759	10.50	VJ275	5.30
1	VJ3759	10.70	VJ375	5.50

Form 200

½	VJ12009	$11.80	VJ1200	$5.70
¾	VJ22009	12.00	VJ2200	5.90
1	VJ32009	12.20	VJ3200	6.10


Type VG

Type VG

Form 100

½	VG1759	$9.50	VG175	$4.30
¾	VG2759	9.70	VG275	4.50

Form 200

½	VG12009	$11.00	VG1200	$4.90
¾	VG22009	11.20	VG2200	5.10


Type VE

Type VE

Form 100

½	VE1759	$9.50	VE175	$4.30
¾	VE2759	9.70	VE275	4.50

Form 200

½	VE12009	$11.00	VE1200	$4.90
¾	VE22009	11.20	VE2200	5.10

ACCESSORIES AND PARTS

For V Series Fixtures, Screw Guard Type

GLOBES



Globe	Form 100 5⅝ In. Long No.	Each	Form 100 6¾ In. Long No.	Each	Form 200 9¼ In. Long No.	Each
Clear	V18	$1.60	V75	$1.60	V200	$1.60
Opal	VN81	3.40	VN71	3.40	VO201	4.70
Green	VN82	3.40	VN72	3.40	VO202	4.70
Blue	VN83	3.40	VN73	3.40	VO203	4.70
Red	VN85	3.40	VN75	3.40	VO205	4.70
Amber	VN86	3.40	VN76	3.40	VO206	4.70
	Prismatic Diffusing Globes					
Clear	-----	-----	V103	$1.60	-----	-----
	Heat-Resisting Globes					
Clear	V183	$2.50	V63	$2.50	V93	$4.00

Pear-Shaped Globes

Clear globes. Cannot be used with straight guards.



Form 100

No.	Each	Lamp Size Watts
V105	$1.60	50, 60, 75, 100

Form 200

V205	$1.60	150
V205	1.60	200

CROUSE-HINDS VAPORTIGHT INDUSTRIAL LIGHTING FIXTURES

ACCESSORIES AND PARTS (Continued)

For V and VH Series Condulets, Clamp Guard

Guards | Guards with Reflector Holders | Guards for Use with Pear-Shaped Globes





Cast Aluminum | **Steel, Tinned Finish**

For Globe In.	Cat. No.	List Each	Cat. No.	List Each	Form	Cat. No.	List Each
5⅝	V95	$3.60	.....	.....	100	.....	.....
6¾	V97	3.60	V913	$3.60	100	V948	$6.00
9¼	VH99	4.50	VH914	4.50	200	VH949	7.00

‡Reflector Holders

Half Shades



Cast Aluminum Cat. No.	List Each	Form	Sheet Aluminum Cat. No.	List Each	For Guard No.
.....	.....	100	SH7	$1.00	V95
V625	$1.00	100	SH1	1.00	V97
VH626	1.30	200	SH2	2.00	VH99



Dome Reflectors | Shallow Bowl Reflectors




Form 100

Cat. No.	List Each	Lamp Size Watts	Dia. In.	Dpth. In.	Cat. No.	List Each	Dia. In.	Dpth. In.
SH-		50, 60,			SH-			
27	$5.50	75, 100	12	5⅛	57	$4.50	12	3⅜
Form 200								
28	$6.50	150	14	6¼	58	$5.50	14	4 3/16
29	7.50	200	16	7⅜	59	6.50	16	4 13/16

Deep Bowl Reflectors | 30° Angle Reflectors




Form 100

SH-		50, 60,			SH-			
47	$5.50	75, 100	8	5 9/16	*67	$4.00	10	8¼
Form 200								
48	$6.50	150	10	7	†68	$7.00	12	10⅜
49	7.50	200	10	7¼	†68	7.00	12	10¾

Receptacles

660 Watts, 600 Volts

Forms 100 and 200




Keyless

No.	Each	Material
V46	$1.30	Porcelain
GS126M2	1.30	Compositon

Shock-Absorbing

No.	Each
.....	.....
V56	$2.50

V56 for use with Pear-Shaped Globes V105 and V205 Only.

‡For clamping reflector to Condulet when guard is not used.

*Center line of Condulet must be located 4⅝ inches from the wall for mounting angle reflector.

†Center line of Condulet must be located 4⅞ inches from the wall for mounting angle reflector.

Reflectors are green porcelain enamel outside and white porcelain enamel inside.

CROUSE-HINDS VAPORTIGHT INDUSTRIAL LIGHTING FIXTURES

Types ARB and VGR

Class III

For flush mounted SE, SEH, and SK series Condulets or 3¼ or 4-inch octagonal outlet boxes.*

Clamp Guard Type

Form 100 is furnished with Globe V75 and Guard V97, and takes 50, 60, 75, or 100-Watt Lamps.

Form 200 is furnished with Globe V200 and Guard VH99, and takes 150 or 200-Watt Lamps.



With Globe and Guard Cat. No.	List Each	Without Globe and Guard Cat. No.	List Each
Ceiling Type			
Form 100			
ARB43	$9.10	ARB44	$3.90
Form 200			
ARB41	10.20	ARB42	4.10



Bracket Type*			
Form 100			
VGR126	10.50	VGR120	5.30
Form 200			
VGR226	12.00	VGR220	5.90

TYPE VXHA

Clamp Guard Type

Has five hubs flush with the surface of the body. The hubs have integral bushings. Four of the hubs are spaced 90° apart around the side of the Condulet, while the fifth hub is placed in the center of the top of the Condulet. Condulet is furnished with four flush type threaded pipe plugs.

Form 100 furnished with V75 globe, and takes 50, 60, 75, or 100-watt lamps. Clamp guard type has V97 guard.

Form 200 furnished with V200 globe and takes 150- or 200-watt lamps. Clamp guard type has VH99 guard.

Cast aluminum guards. Cast Feraloy Condulets.

Form 100

Size In.	With Globe and Guard No.	Each	Without Globe and Guard No.	Each
½	VXHA112	$10.20	VXHA11	$5.00
¾	VXHA212	10.60	VXHA21	5.40
1	VXHA312	10.90	VXHA31	5.70
Form 200				
½	VXHA152	$11.90	VXHA151	$5.80
¾	VXHA252	12.30	VXHA251	6.20
1	VXHA352	12.60	VXHA351	6.50



Forms 100 and 200 indicate sizes of vaportight fixtures. Accessories and parts are correspondingly classified.

If specified on the order, lamp receptacle with lamp grip will be furnished at an advance of **$0.20** in the list price.

If specified on the order, pigtail receptacle will be furnished at an advance of **$0.90** in the list price.

*Type VGR bracket fixtures can be furnished without overhang for surface mounting on SE, SEH, or SK series Condulets at no additional charge. Catalog numbers on request.

CROUSE-HINDS VAPORTIGHT INDUSTRIAL LIGHTING FIXTURES

ACCESSORIES AND PARTS (Continued)

For V Series Fixtures, Screw Guard Type

Guards | Guards with Reflector Holders | Guards for Use with Pear-Shaped Globes





Cast Aluminum | **Steel, Tinned Finish**

For Globe In.	Cat. No.	List Each	Cat. No.	List Each	Form	Cat. No.	List Each
5⅝	V910	$3.60	-------	-------	100	-------	-------
6¾	V911	3.60	V911	$3.60	100	V946	$6.00
9¼	V912	4.50	V912	4.50	200	V947	7.00

‡Reflector Holders



Cast Aluminum

Cat. No.	List Each	Form	Cat. No.	List Each	For Guard No.
-------	-------	100	V916	$1.00	V910
V623	$1.00	100	V918	1.00	V911
V624	1.30	200	V919	2.00	V912

Half Shades — Sheet Aluminum



Dome Reflectors — Shallow Bowl Reflectors




Form 100

Cat. No.	List Each	Lamp Size Watts	Dia. In.	Dpth. In.	Cat. No.	List Each	Dia. In.	Dpth. In.
SH-		50, 60,			SH-			
27	$5.50	75, 100	12	5⅛	57	$4.50	12	3⅜
Form 200								
28	$6.50	150	14	6¼	58	$5.50	14	4 3/16
29	7.50	200	16	7⅜	59	6.50	16	4 13/16

Deep Bowl Reflectors — 30° Angle Reflectors




Form 100

SH-		50, 60,			SH-			
47	$5.50	75, 100	8	5 5/16	*67	$4.00	10	8¼
Form 200								
48	$6.50	150	10	7	†68	$7.00	12	10⅜
49	7.50	200	10	7¼	†68	7.00	12	10¾

Receptacles

660 Watts, 600 Volts

Forms 100 and 200




Keyless

Cat. No.	List Each	Material
V46	$1.30	Porcelain
GS126M2	1.30	Composition

Shock-Absorbing

Cat. No.	List Each
------	--------
V56	$2.50

V56 for use with Pear-Shaped Globes V105 and V205 Only.

*Center line of Condulet must be located 4⅝ inches from the wall for mounting angle reflector.

†Center line of Condulet must be located 4⅞ inches from the wall for mounting angle reflector.

Reflectors are green porcelain enamel outside and white porcelain enamel inside.

‡For clamping reflector to Condulet when guard is not used.

CROUSE-HINDS VAPORTIGHT INDUSTRIAL LIGHTING FIXTURES

TYPES ARB AND VGR

Class III

For flush mounted SE, SEH, and SK series Condulets or 3¼ or 4-inch octagonal outlet boxes.*

Screw Guard Type

Form 100 is furnished with Globe V75 and Guard V911, and takes 50, 60, 75, or 100-watt Lamps.

Form 200 is furnished with Globe V200 and Guard V912, and takes 150 or 200-watt Lamps.



	With Globe and Guard — Cat. No.	List Each	Without Globe and Guard — Cat. No.	List Each
Ceiling Type				
Form 100				
ARB31	$9.10		ARB32	$3.90
Form 200				
ARB33	10.20		ARB34	4.10
Bracket Type*				
Form 100				
VGR116	10.50		VGR110	5.30
Form 200				
VGR216	12.00		VGR210	5.90



TYPE VXHA

Screw Guard Type

Class III

Has five hubs flush with the surface of the body. The hubs have integral bushings. Four of the hubs are spaced 90° apart around the side of the Condulet, while the fifth hub is placed in the center of the top of the Condulet. Condulet is furnished with four flush type threaded pipe plugs.

Form 100 furnished with V75 globe, and takes 50, 60, 75, or 100-watt lamps. Screw guard type has V911 guard.

Form 200 furnished with V200 globe and takes 150- or 200-watt lamps. Screw guard type has V912 guard.

Cast aluminum guards. Cast Feraloy Condulets.



Size In.	With Globe and Guard — No.	Each	Without Globe and Guard — No.	Each
Form 100				
½	VXHA1199	$10.20	VXHA119	$5.00
¾	VXHA2199	10.60	VXHA219	5.40
1	VXHA3199	10.90	VXHA319	5.70
Form 200				
½	VXHA1299	$11.90	VXHA129	$5.80
¾	VXHA2299	12.30	VXHA229	6.20
1	VXHA3299	12.60	VXHA329	6.50

Forms 100 and 200 indicate sizes of vaportight fixtures. Accessories and parts are correspondingly classified.

If specified, lamp receptacle with lamp grip will be furnished at an advance of **20** cents in list price.

If specified, pigtail receptacle will be furnished at an advance of **90** cents in list price.

*Type VGR bracket fixtures can be furnished without overhang for surface mounting on SE, SEH, or SK series Condulets or outlet boxes at no additional charge. Catalog numbers on request.

CROUSE-HINDS VAPORTIGHT INDUSTRIAL LIGHTING FIXTURES

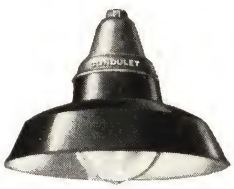
TYPE VDB FIXTURES WITH REFLECTORS

Type VDB is a cast aluminum fixture of the vaportight type, designed to meet the need for a simple, effective, and inexpensive vaportight industrial lighting fixture.

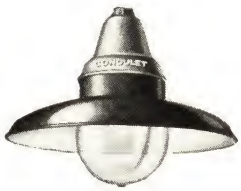
Furnished with a clear, plain pear-shaped globe, and a porcelain enameled reflector. The reflector is held to the body by four screws.

Form 3 furnished with No. VDB3 globe, reflector, and medium base lamp receptacle.

Form 5 furnished with No. VDB5 globe, reflector, and mogul base lamp receptacle.









Cat. No.	List Each	Form	Size In.	Lamp Watts
With Dome Reflectors				
VDB-				
138	$12.40	3	½	150
238	12.40	3	¾	150
139	15.25	3	½	200/300
239	15.25	3	¾	200/300
15	18.90	5	½	300/500
25	18.90	5	¾	300/500
Reflectors Only				
28	$4.00	3	14	150
29	6.85	3	16	200/300
115	8.20	5	18	300/500
With Deep Bowl Reflectors				
137	$16.00	5	½	300/500
237	16.00	5	¾	300/500
Reflector Only				
225	$5.30	5	12	300/500
With Shallow Bowl Reflectors				
13	$12.90	3	½	150
23	12.90	3	¾	150
17	15.25	3	½	200/300
27	15.25	3	¾	200/300
16	18.90	5	½	300/500
26	18.90	5	¾	300/500
Reflectors Only				
113	$4.50	3	14	150
117	6.85	3	16	200/300
19	8.20	5	18	300/500
With 30° Angle Reflectors*				
143	$13.60	3	½	150/200/300
243	13.60	3	¾	150/200/300
145	18.00	5	½	300/500
245	18.00	5	¾	300/500
Reflectors Only				
213	$5.20	3	12	150/200/300
215	7.30	5	14	300/500

*Center line of fixture must be located 5 inches from the wall for mounting.

ACCESSORIES FOR VAPORTIGHT INDUSTRIAL LIGHTING FIXTURES



Pear-Shaped Globes—Clear

Form 3

Lamp Size Watts	Plain No.	Plain Each	Heat-Resisting No.	Heat-Resisting Each
150, 200, 300	VDB3	$2.00	VDB6	$7.85
Form 5				
300, 500	VDB5	3.30	VDB8	11.40

Basket Wire Guards



Steel, tinned finish.

For use with reflectors listed above; also with reflectors for V and VH series Condulets.

No.	V932	V934	V936	V938
Each	$3.65	4.20	4.75	5.30
For Size Reflector, In...	12	14	16	18

CROUSE-HINDS VAPORTIGHT INDUSTRIAL LIGHTING FIXTURES

TYPE VS VAPORTIGHT PORTABLE HAND LAMPS



Clamp Guard Type

Made of cast aluminum, with molded rubber handle.

Furnished with globe, guard, receptacle and three rubber bushings. Lamp receptacle has additional binding screw terminal for grounding. Cable, .250 to .625.

Cat. No.	List Each	Size Lamp Watts		Size Globe Inches
VS20	$12.80	60, 100	A21	5⅝
VS30	12.80	100	A23*	6¾



Clamp Guard Type

Made of cast aluminum, with hard wood handle.

Furnished with globe, guard, receptacle and three rubber bushings. Lamp receptacle has additional binding screw terminal for grounding. Cable, .250 to .625.

Cat. No.	List Each	Size Lamp Watts		Size Globe Inches
VS91	$12.80	60, 100	A21	5⅝
VS92	12.80	100	A23*	6¾

GUARDS FOR TYPE VS VAPORTIGHT PORTABLE HAND LAMPS

Made of steel wire.



Clamp Guard

Clamp Guard Type

Cat. No.	List Each	For Globe Inches
VS95	$4.00	5⅝
VS97	4.00	6¾

GLOBES FOR TYPE VS VAPORTIGHT PORTABLE HAND LAMPS

Clear



Size In.	Plain No.	Plain Each	Heat-Resisting No.	Heat-Resisting Each
5⅝	V18	$1.60	V183	$2.50
*6¾	V75	1.60	V63	2.50

SAFETY HAND LAMPS

Types LPG and LPH



Type LPG24

Take 15 to 100-watt lamps.

Seasoned maple handle, black enameled.

Aluminum alloy guard and half shade.

No.	Each
LPG24, with Guard	$6.00
LPH24, with Guard and Half Shade	6.30



Type LPH24

*Will take lamps with maximum dimensions of 6½ inches long and 2⅞ inches diameter.

CROUSE-HINDS INDUSTRIAL LIGHTING FIXTURES

TYPE VLG GAUGE LIGHTING FIXTURES

Take T8 Lumiline or T8 Fluorescent lamps, 110-125 volts. Hub sizes: ¾ inch.



Type VLG260 Type VLG280 Type VLG215

Cat. No.	List Each	Lamp	Size
VLG260	$36.00	1 Lumiline	60-Watt—18″
VLG280	55.00	2 Lumiline	40-Watt—12″
VLG215	54.00	1 Fluorescent With Starter and Ballast for 110-125 Volts A.C. 60 Cycles	15-Watt—18″

TYPE LG GAUGE LAMPS

Take 10-watt S14 bulb or 15-watt A15 or A17 bulb lamps.

Cast aluminum. Furnished with lamp receptacle with lamp grip.

Also, obtainable for round flexible cable and flexible conduit or armored cable (as shown in the illustrations) at the same prices; information on request.

Water Glass Lamps **Lubricator Lamps**





Vertical Slot Cat. No.	List Each	Size Rigid Conduit	13-Inch Slot† Cat. No.	List Each
LG21	$7.00	½	LG31	$10.00



Multiple Steam and Air Gauge Lamps Rectangular Opening

Cat. No.	List Each	Size Rigid Conduit
LG61	$8.50	½



Single Steam and Air Gauge Lamps Round Opening

Cat. No.	List Each	Size Rigid Conduit
LG11	$7.00	½

†25-watt type T8 lamp can be used.

CROUSE-HINDS FIXTURE HANGERS

EC SERIES FLEXIBLE LIGHTING FIXTURE SUPPORTS

Explosion-Proof, Dust-Tight, and Watertight
Class I, Group D; Class II, Groups E, F, and G; and Class III

The 1947 National Electrical Code requires the use of flexible member for fixture stems longer than 12 inches. This flexible member must not be more than 12 inches from the point of attachment to the supporting Condulet. (Section 5019 N.E.C.)

½-inch EC series flexible fixture supports are also suitable for Class I, Group C locations. ¾-inch supports, suitable for Class I, Group C locations, can be supplied and are made up using heavier flexible tubing. Add suffix DB to the catalog numbers and **$0.60** per inch of flexible length.

Type ECJF **Type ECHF**



Flexible Lgth.†	Size Nipple	Two Female Nipples Cat. No.	Overall Lgth.	List Each	Two Male Nipples Cat. No.	Overall Lgth.	List Each
		ECJF-			ECHF-		
	½	14	8″	$11.50	14	8″	$10.90
4″	¾	24	8″	14.40	24	8″	13.40
	½	16	10″	12.50	16	10″	11.90
6″	¾	26	10″	15.80	26	10″	14.80
	½	18	12″	13.50	18	12″	12.90
8″	¾	28	12″	17.20	28	12″	16.20

Type ECGF **Type ECKF**



		One Female Nipple, One Male Nipple Cat. No.	Overall Lgth.	List Each	One Female Union, One Male Nipple Cat. No.	Overall Lgth.	List Each
		ECGF-			ECKF-		
	½	14	8″	$11.20	....	.....	.....
4″	¾	24	8″	13.90	24	8¼″	$14.70
	½	16	10″	12.20	....	.....	.....
6″	¾	26	10″	15.30	26	10¼″	16.10
	½	18	12″	13.20	....	.....	.....
8″	¾	28	12″	16.70	28	12¼″	17.50

Type ECF

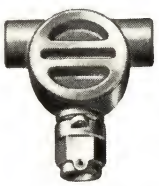
For use with pendent lighting fixtures having 1¼-inch hubs. Has two male nipples; flexible body is ¾″ size.



		ECF-					
6″	1¼	44	12″	$20.00	....	.....	.....

Type EFHC

For EVA, EVF, and DLA Pendent Fixtures Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)
Class I, Groups C and D; Class II, Groups E, F, and G; and Class III



Size Hub	Size Fixture Stem	Cat. No.	List Each
	½	EFHC2601	$9.70
¾	¾	EFHC2602	9.70
	1½	EFHC3601	10.00
1	¾	EFHC3602	10.00



Accessories for Type EFHC

Connection Block—Porcelain 2-Wire 20-A., 125-V.	CB308	$0.60

Suspension attachment for type EFHC Condulets can be furnished for ⅜″ max. dia. supporting rod or span wires. Add suffix S1 to Cat. No. and **$0.40** to list price.

†EC series flexible fixture supports can be furnished with longer flexible lengths. Prices and catalog numbers on application.

AL SERIES FLEXIBLE FIXTURE HANGER CONDULETS

For Pendent Fixtures

AL series Condulets provide a flexible suspension for electrical fixtures. The fixtures are suspended from a universal joint which assures that the fixture will hang plumb.

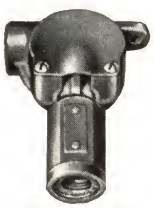
This universal joint permits the fixture to swing through an angle of about 20 degrees in any direction from the perpendicular.



Type ALA Ball

Type ALA Ball Hangers

Cat. No.	List Each	THREADED Thick-Wall Fixture Wt. Lbs.	Size, In. Fixture Stem	Size, In. Conduit
ALA1	$1.30	.....	½	½
ALA21	1.50	.....	½	¾
ALA22	1.70	.....	¾	¾



Type ALA Cushion

Type ALA Cushion Hangers

Cat. No.	List Each	THREADED Thick-Wall Fixture Wt. Lbs.	Size, In. Fixture Stem	Size, In. Conduit
ALA14	$2.80	3	½	½
ALA214	3.00	to	½	¾
ALA224	3.20	6	¾	¾
ALA18	2.80	6	½	½
ALA218	3.00	to	½	¾
ALA228	3.20	12	¾	¾
ALA116	2.80	12	½	½
ALA2116	3.00	to	½	¾
ALA2216	3.20	24	¾	¾



Type ALC Ball

Type ALC Ball Hangers

Cat. No.	List Each	THREADED Thick-Wall Fixture Wt. Lbs.	Size, In. Fixture Stem	Size, In. Conduit
ALC1	$1.50	.....	½	½
ALC21	1.70	.....	½	¾
ALC31	1.90	.....	½	1
ALC22	1.90	.....	¾	¾
ALC32	2.10	.....	¾	1



Type ALC Cushion

Type ALC Cushion Hangers

Cat. No.	List Each	THREADED Thick-Wall Fixture Wt. Lbs.	Size, In. Fixture Stem	Size, In. Conduit
ALC14	$3.00	3	½	½
ALC214	3.20	to	½	¾
ALC314	3.40	6	½	1
ALC224	3.40		¾	¾
ALC324	3.60		¾	1
ALC18	3.00	6	½	½
ALC218	3.20	to	½	¾
ALC318	3.40	12	½	1
ALC228	3.40		¾	¾
ALC328	3.60		¾	1
ALC116	3.00	12	½	½
ALC2116	3.20	to	½	¾
ALC3116	3.40	24	½	1
ALC2216	3.40		¾	¾
ALC3216	3.60		¾	1

CONNECTION BLOCK

For AL Series Fixture Hanger Condulets

20 Amperes, 125 Volts



Description	Material	Cat. No.	List Each
2-Wire	Porcelain	CB308	$0.60

AL SERIES FLEXIBLE FIXTURE HANGER SUSPENSION ATTACHMENT

For Horizontal Span Wire or Vertical Support Rod



AL series flexible fixture hanger Condulets can be furnished with a malleable iron loop fastened to the top of the Condulet body to provide means for suspending fixtures from vertical support rods or horizontal span wires. The loop will take a wire or cable with a maximum diameter of ⅜ of an inch. The boss on the top of the loop is tapped ⅜—16, for a threaded rod.

When this suspension attachment is required, add suffix S1 to the AL series catalog number and **$0.40** to the list price.

Cushion Hangers for fixtures weighing up to 64 lbs. can be furnished. Information on request.

CROUSE-HINDS FIXTURE HANGERS

TYPE AHG VAPORTIGHT FLEXIBLE CUSHION FIXTURE HANGERS

For Pendent Fixtures



Type AHG Cushion

Cat. No.	List Each	Wt. Fixture Lbs.	Size, In. Fixture Stem	Size, In. Male Nipple
AHG11102	$2.90	2 to	½	½
AHG21102	3.00	4	½	¾
AHG11103	2.90	4 to	½	½
AHG21103	3.00	8	½	¾
AHG11104	2.90	8 to	½	½
AHG21104	3.00	16	½	¾
AHG11111	2.90	16 to	½	½
AHG21111	3.00	30	½	¾

TYPES UNJ AND UNJC

For supporting pendent fixtures so that they will always hang plumb, even though supported from an inclined surface.

They will allow the fixture to swing through an angle of 20° in any direction from the perpendicular.

Type UNJ Ball Hangers

Cat. No.	List Each	Stem In.	Hub In.
UNJ1308	$1.30	⅜	½
UNJ1	1.30	½	½
UNJ2308	1.50	⅜	¾
UNJ21	1.50	½	¾
UNJ2	1.50	¾	¾



Type UNJ Ball

Type UNJC Cushion Hangers

Provided with spring which carries the weight of the fixture and absorbs any shocks due to vibration or other causes.



Type UNJC Cushion

Cat. No.	List Each	Stem In.	Male Nipple In.	Fixture Weight Pounds
UNJC12	$2.70	½	½	1½–3
UNJC22	3.20	¾	¾	1½–3
UNJC14	2.70	½	½	3–6
UNJC24	3.20	¾	¾	3–6
UNJC18	2.70	½	½	6–12
UNJC28	3.20	¾	¾	6–12
UNJC116	2.70	½	½	12–24
UNJC216	3.20	¾	¾	12–24
UNJC132	2.90	½	½	24–48
UNJC232	3.40	¾	¾	24–48

TYPE GS FLEXIBLE FIXTURE HANGERS

For GS Series Condulets—For Pendent Fixtures

Vaportight Cat. No. GS-	List Each	Weight Fixture Lbs.	Size Fixture Stem	Cat. No. GS-	List Each
1302	$2.70	2 to 4	½	1064	$2.30
1303	2.70	4 to 8	½	1066	2.30
1304	2.70	8 to 16	½	1067	2.30
1311	2.70	16 to 30	½	1068	2.30



TYPE ARB

For use on concealed conduit systems. Provide flexible suspension for pendent fixtures with ½-inch conduit stem.

Fastening screws spaced 3½ inches center to center are provided for use on standard 4-inch outlet boxes.



Type ARB Ball

Ball Hanger

Cat. No.	List Each	Size In.
ARB6	$1.60	½



Type ARB Cushion

Cushion Hangers

Cat. No.	List Each	Fixture Weight Pounds
ARB14	$1.90	2–4
ARB8	1.90	4–8
ARB10	1.90	8–16
ARB12	1.90	16–30

FIXTURE HANGER CONDULETS

Type UNH Rigid Hangers


Male

Size Fix. Stem In.	Male Cat. No.	Male List Each	Female Cat. No.	Female List Each
½	UNH16	$0.60	UNH1	$0.50
¾	UNH26	.70	UNH2	.60


Female

Type UNHC Cushion Hangers

Cat. No.	List Each	Wt. Fixture, Lbs.	Size Fixture Stem
UNHC12	$1.50	1½ to 3	½ ¾
UNHC22	1.60		
UNHC14	1.50	3 to 6	½ ¾
UNHC24	1.60		
UNHC18	1.50	6 to 12	½ ¾
UNHC28	1.60		
UNHC116	1.50	12 to 24	½ ¾
UNHC216	1.60		
UNHC132	1.50	24 to 48	½ ¾
UNHC232	1.60		
UNHC164	1.50	48 to 64	½ ¾
UNHC264	1.60		



Type UNE Fixture Loops


Male

Size Fix. Stem In.	Male Cat. No.	Male List Each	Female Cat. No.	Female List Each
½	UNE16	$0.60	UNE1	$0.50
¾	UNE26	.70	UNE2	.60


Female

Type FOH Fixture Hanger Equipment For Fluorescent Lighting Fixtures



Used to suspend a fluorescent lighting fixture from a regular threaded conduit hub of an Obround, FS or other Condulet in an overhead conduit line. A receptacle cover on the Condulet and a flexible cord with attachment plug on the fixture provide a convenient means for quickly connecting or disconnecting the fixture.

Size of Conduit Hub and Connector	Yoke, Connector, Two Chains, Hooks and Cord Clips Cat. No.	List Each	Yoke, Connector and Cord Clips without Chains and Hooks* Cat. No.	List Each
½	FOH122	$2.80	FOH120	$2.00
¾	FOH222	2.90	FOH220	2.10
1	FOH322	3.00	FOH320	2.20

Type OSA Suspension Hangers



Cat. No.	List Each	Size Conduit	Max. Dia. Span Wire	Support Rod Tap
OSA3	$1.00	½	⅜	⅜–16
OSA3	1.00	¾		
OSA3	1.00	1		
OSA4	1.15	1¼		

Type CHS Suspension Clamps



Cat. No.	List Each	Size Conduit	Max. Dia. Span Wire
CHS143	$0.45	½	⅜
CHS243	.60	¾	
CHS343	.75	1	

*⅛ inch diameter rods with hooks formed on the ends to engage yoke and fixture may be used in place of chains, if desired.

CROUSE-HINDS PLUGS AND RECEPTACLES

TYPES CES AND CESD DELAYED ACTION ARKTITE PLUG RECEPTACLE CONDULETS

Explosion-Proof—Class I, Group D*
Includes Condulet, Receptacle, and Receptacle Housing—Takes Type CPH Plugs
Style 2—Grounded Through Extra Pole and Shell

Interchangeability: Types AP and APJ **Arktite** circuit-breaking plugs cannot be used with types CES and CESD delayed action **Arktite** receptacles. Type CPH delayed action **Arktite** plugs, however, can be used with regular style 2 **Arktite** receptacles of the same rating and pole arrangement. This fact may be utilized in a plant having hazardous and non-hazardous locations as follows:

Types CES or CESD delayed action receptacle Condulets can be installed in the hazardous areas.

Regular Style 2 **Arktite** receptacles rated 30 or 60 amperes, 2-wire, 3-pole or 3-wire, 4-pole can be installed in non-hazardous areas.

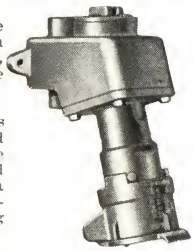
Portable equipment suitable for use in the hazardous areas may be equipped with type CPH delayed action plugs. Such equipment may then be used anywhere in the plant, including the non-hazardous areas.

Portable equipment not suitable for use in such areas may be equipped with regular types AP and APJ **Arktite** plugs and such equipment can then be used in any non-hazardous location in the plant, but there is complete assurance that it cannot be connected to a receptacle in the hazardous areas.



Type CES Condulets have three hubs, one on each side and one at the top, and two threaded pipe plugs.

Type CESD Condulets have vertical through feed hubs and one threaded pipe plug. There is a threaded opening in the top with a cover which may be removed to facilitate pulling wires.



Size Hubs	Circuit	Phases	Max. H.P.	Max. Amps.	Volts at 60 Cy. A.C.	Cat. No. CES-CESD-	List Each
¾	2-Wire	1	½	7	460	2213	$47.00
	3-Pole		1½	30	115 to 230		47.00
¾	3-Wire	3	1	7	460	2214	50.00
	4-Pole		3	30	115 to 230		50.00
1¼	2-Wire	1	3	30	460	4233	59.00
	3-Pole			60	115 to 230		59.00
1¼	3-Wire	3	5	30	460	4234	66.00
	4-Pole			60	115 to 230		66.00

Type CPH Plugs



For Types CES and CESD Receptacle Equipment. Furnished with Mechanical Cable Grip and Rubber Bushing.

Circuit	Ph.	Max. H.P.	Max. Aps.	Volts at 60 Cy. A.C.	Diameter Cable	Cat. No. CPH-	List Each
2-W.	1	½	7	460	.375- .875	7713	$22.00
3-P.		1½	30	115-230	.875-1.375	7913	22.00
3-W.	3	1	7	460	.375- .875	7714	23.50
4-P.		3	30	115-230	.875-1.375	7914	23.50
2-W.	1	3	30	460	.500- .875	7733	26.00
3-P.			60	115-230	.875-1.375	7933	26.00
3-W.	3	5	30	460	.500- .875	7734	28.00
4-P.			60	115-230	.875-1.375	7934	28.00

*Type CES receptacle Condulets and type CPH plugs are also suitable for Class I, Group C.

CROUSE-HINDS PLUGS AND RECEPTACLES

TYPE CPS DELAYED ACTION ARKTITE PLUG RECEPTACLE EQUIPMENT

Explosion-Proof

Class I, Groups C and D

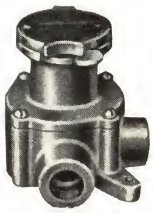
Includes Condulet and Receptacle—Takes Type CPP Plugs. 2-Wire, 3-Pole—15-Ampere or 1 H.P., 115 or 230-Volt, 60-Cycle A.C.

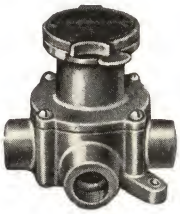


Dead End



Through Feed


"L"


"T"


"X"

Hub Arrangement	Size Hub	Complete Cat. No.	Complete List Each	Body Only Cat. No.	Body Only List Each
		CPS-		CPS-	
Dead End	½	14–120	$25.80	120	$2.30
	¾	14–20	26.10	20	2.60
Through Feed	½	14–121	26.10	121	2.60
	¾	14–21	26.50	21	3.00
"L"	½	14–122	26.10	122	2.60
	¾	14–22	26.50	22	3.00
"T"	½	14–123	26.40	123	2.90
	¾	14–23	26.90	23	3.40
"X"	½	14–124	26.70	124	3.20
	¾	14–24	27.30	24	3.80

TYPE CPP PLUGS

For Type CPS Receptacle Units; also Type CPS152 Plug Receptacle Condulets

Furnished with Cable Grip and Rubber Bushing

With Molded Composition Handle



With Aluminum Handle



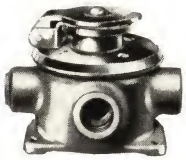
Cat. No.	List Each	15-Ampere or 1-H.P.	Diameter Cable	Cat. No.	List Each
CPP-				CPP-	
312	$10.00	115 or 230-V.	.250-.375	316	$10.00
412	10.00	60-C. A.C.	.375-.500	416	10.00
512	10.00	2-W., 3-P.	.500-.625	516	10.00

CROUSE-HINDS PLUGS AND RECEPTACLES

NON-ADJUSTABLE TYPE CPS DELAYED ACTION ARKTITE PLUG RECEPTACLE CONDULETS**

Explosion-Proof

Class I, Groups C and D



Receptacle Unit includes Receptacle with Sealed Housing and Spring Door. Takes Type CPP Plugs.

15-A., 1 H.P.—115 or 230-V., A.C.
2-Wire, 3-Pole

Size Hub	Condulet With Receptacle Unit Cat. No.	Condulet With Receptacle Unit List Each	Receptacle Unit** Cat. No.	Receptacle Unit** List Each
		Chromium-Plated		
¾	CPS212	$40.00	CPS212-R	$35.00
		Plain		
¾	CPS2162	28.00	CPS2162-R	23.00

REPLACEMENT PLUG RECEPTACLE UNITS**

For Replacement of Non-Explosion-Proof Plug Receptacles

Replacement Unit includes Receptacle with Sealed Housing and Spring Door. Takes Type CPP Plugs.



15-A., 1 H.P.—115 or 230-V., A.C.
2-Wire, 3-Pole

	Cat. No.	List Each
Chromium Plated	CPS212-S33	$37.00
Plain	CPS2162-S33	25.00

For mounting on single gang switch boxes and switch box covers.

TYPE CPS DELAYED ACTION ARKTITE PLUG RECEPTACLE CONDULETS

Explosion-Proof—Class I, Groups C and D



The type CPS Condulets are equipped with delayed action receptacle housings which prevent the complete withdrawal of the plugs in one continuous movement, but allows them to be withdrawn far enough to interrupt the circuit and break the arc in the explosion-proof arcing chambers of the receptacle.

Receptacle includes Receptacle with Sealed Housing having a Spring Door which also controls the Delayed Action feature. Takes type CPP Plugs.

2-Wire, 3-Pole—15-A., or 1 H.P.
115 or 230-V., 60 Cycle A.C.

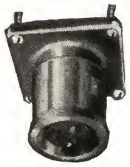
Size Hub	Condulet with Receptacle Unit Cat. No.	Condulet with Receptacle Unit Price Each	Body Only Cat. No.	Body Only Price Each	Receptacle Unit Only Cat. No.	Receptacle Unit Only Price Each
	CPS-		EFS-			
½	152-101	$25.80	171	$3.00	CPS152R	$22.80
¾	152-201	25.90	271	3.10		
1	152-301	26.10	371	3.30		

**Non-interchangeable CPS receptacles and CPP plugs can be furnished. Information on request.

CROUSE-HINDS ARKTITE PLUGS AND RECEPTACLES

Weather Resistant (Raintight)*

20, 30, and 60-Ampere—250 Volts D.C., 600 Volts A.C.

Type ARE Receptacle Equipment†				Type APJ Plugs				Type AR Receptacle Housings				
Style 1—Grounded Through Shell. Style 2—Grounded Through Extra Pole and Shell.				Receptacles will take any of the plugs grouped in the bracket opposite the receptacle listings. 								Condulet Body†
Description		Spring Door		Plain		With Mechanical Cable Grip and Rubber Bushing‡		Spring Door		Plain		
		Cat. No.	List	Cat. No.	List	Dia. Cable	Cat. No. List	Cat. No.	List	Cat. No.	List	
20-Ampere—Style 1*												For AR Series, Form B
2-Wire, 2-Pole*	½	ARE2211	$12.90	ARE2231	$11.50	.250 to .500	APJ2251 $11.00	AR221	$10.90	AR223	$ 9.50	
	¾	ARE2212	13.10	ARE2232	11.70	.500 to .875	APJ2253 11.00					
30-Ampere—Style 1												
2-Wire, 2-Pole	½	ARE3211	$14.50	ARE3231	$13.10	.500 to .875	APJ3253 $12.30	AR321	$12.50	AR323	$11.10	
	¾	ARE3212	14.70	ARE3232	13.30	.875 to 1.375	APJ3255 12.30					
3-Wire, 3-Pole	¾	ARE3312	15.70	ARE3332	14.30	.500 to .875	APJ3353 13.60	AR331	13.50	AR333	12.10	
	1	ARE3313	15.90	ARE3333	14.50	.875 to 1.375	APJ3355 13.60					
4-Wire, 4-Pole	¾	ARE3412	17.30	ARE3432	15.90	.500 to .875	APJ3453 15.20	AR341	15.10	AR343	13.70	
	1	ARE3413	17.50	ARE3433	16.10	.875 to 1.375	APJ3455 15.20					
5-Wire, 5-Pole	1	ARE3513	19.90	ARE3533	18.50	.500 to .875	APJ3553 17.70	AR351	17.50	AR353	16.10	
30-Ampere—Style 2												
2-Wire, 3-Pole	¾	ARE3322	$17.70	ARE3342	$16.30	.500 to .875	APJ3363 $15.60	AR332	$15.50	AR334	$14.10	
	1	ARE3323	17.90	ARE3343	16.50	.875 to 1.375	APJ3365 15.60					
3-Wire, 4-Pole	¾	ARE3422	19.30	ARE3442	17.90	.500 to .875	APJ3463 17.20	AR342	17.10	AR344	15.70	
	1	ARE3423	19.50	ARE3443	18.10	.875 to 1.375	APJ3465 17.20					
4-Wire, 5-Pole	1	ARE3523	23.00	ARE3543	21.60	.500 to .875	APJ3563 21.00	AR352	20.60	AR354	19.20	
60-Ampere—Style 1												For AR and AJ Series, Form C
2-Wire, 2-Pole	1	ARE6213	$23.30	ARE6233	$20.80	.500 to .875	APJ6253 $17.50	AR621	$20.00	AR623	$17.50	
	1¼	ARE6214	23.50	ARE6234	21.00	.875 to 1.375	APJ6255 17.50					
3-Wire, 3-Pole	1	ARE6313	25.30	ARE6333	22.80	.500 to .875	APJ6353 19.00	AR631	22.00	AR633	19.50	
	1¼	ARE6314	25.50	ARE6334	23.00	.875 to 1.375	APJ6355 19.00					
4-Wire, 4-Pole	1¼	ARE6414	29.50	ARE6434	27.00	.500 to .875	APJ6453 21.00	AR641	26.00	AR643	23.50	
	1½	ARE6415	29.70	ARE6435	27.20	.875 to 1.375	APJ6455 21.00					
60-Ampere—Style 2												
2-Wire, 3-Pole	1	ARE6323	$27.80	ARE6343	$25.30	.500 to .875	APJ6363 $21.50	AR632	$24.50	AR634	$22.00	
	1¼	ARE6324	28.00	ARE6344	25.50	.875 to 1.375	APJ6365 21.50					
3-Wire, 4-Pole	1¼	ARE6424	32.00	ARE6444	29.50	.500 to .875	APJ6463 23.50	AR642	28.50	AR644	26.00	
	1½	ARE6425	32.20	ARE6445	29.70	.875 to 1.375	APJ6465 23.50					

*20-ampere, 2-pole plugs and receptacles have binding screw terminals. All others have soldering terminals for line conductors and a pressure type terminal for the grounding conductor.

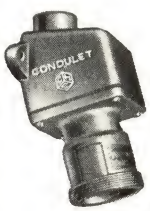
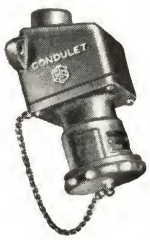
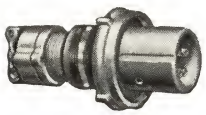
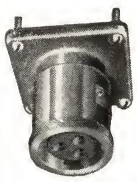
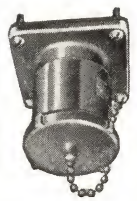
†Where other hub arrangements are desired, type AR receptacle housings can be used with Condulet bodies listed on another page.

‡Where non-watertight plugs are required, add Suffix NB to the above catalog numbers. The set of rubber bushings will then be omitted at the following reductions in list prices: 20-A, **$0.60**; 30-A., **$1.00**; 60-A., **$1.00**. *Spring door housing only, when downwardly inclined.

CROUSE-HINDS ARKTITE PLUGS AND RECEPTACLES

Weather Resistant (Raintight)*

20, 30, and 60-Ampere—250 Volts D.C., 600 Volts A.C.

Description	Type ARE Receptacle Equipment†				Type APJ Plugs			Type AR Receptacle Housings			
Style 1—Grounded Through Shell. Style 2—Grounded Through Extra Pole and Shell.					Receptacles will take any of the plugs grouped n the bracket opposite the receptacle listings. With Fastening Ring 						
	Threaded		With Cap		With Mechanical Cable Grip and Rubber Bushing‡			Threaded		With Cap	
	Cat. No.	List	Cat. No.	List	Dia. Cable	Cat. No.	List	Cat. No.	List	Cat. No.	List
20-Ampere—Style 1*											
2-Wire, 2-Pole*	½	ARE2251	$12.00	ARE2271	$13.60	.250 to .500	APJ2271	$12.20	AR225	$10.00	AR227 $11.60
	¾	ARE2252	12.20	ARE2272	13.80	.500 to .875	APJ2273	12.20			
30-Ampere—Style 1											
2-Wire, 2-Pole	½	ARE3251	$13.60	ARE3271	$15.20	.500 to .875	APJ3273	$13.50	AR325	$11.60	AR327 $13.20
	¾	ARE3252	13.80	ARE3272	15.40	.875 to 1.375	APJ3275	13.50			
3-Wire, 3-Pole	¾	ARE3352	14.80	ARE3372	16.40	.500 to .875	APJ3373	14.80	AR335	12.60	AR337 14.20
	1	ARE3353	15.00	ARE3373	16.60	.875 to 1.375	APJ3375	14.80			
4-Wire, 4-Pole	¾	ARE3452	16.40	ARE3472	18.00	.500 to .875	APJ3473	16.40	AR345	14.20	AR347 15.80
	1	ARE3453	16.60	ARE3473	18.20	.875 to 1.375	APJ3475	16.40			
5-Wire, 5-Pole	1	ARE3553	19.00	ARE3573	20.60	.500 to .875	APJ3573	18.90	AR355	16.60	AR357 18.20
30-Ampere—Style 2											
2-Wire, 3-Pole	¾	ARE3362	$16.80	ARE3382	$18.40	.500 to .875	APJ3383	$16.80	AR336	$14.60	AR338 $16.20
	1	ARE3363	17.00	ARE3383	18.60	.875 to 1.375	APJ3385	16.80			
3-Wire, 4-Pole	¾	ARE3462	18.40	ARE3482	20.00	.500 to .875	APJ3483	18.40	AR346	16.20	AR348 17.80
	1	ARE3463	18.60	ARE3483	20.20	.875 to 1.375	APJ3485	18.40			
4-Wire, 5-Pole	1	ARE3563	21.90	ARE3583	23.50	.500 to .875	APJ3583	22.20	AR356	19.50	AR358 21.10
60-Ampere—Style 1											
2-Wire, 2-Pole	1	ARE6253	$21.50	ARE6273	$23.70	.500 to .875	APJ6273	$19.50	AR625	$18.20	AR627 $20.40
	1¼	ARE6254	21.70	ARE6274	23.90	.875 to 1.375	APJ6275	19.50			
3-Wire, 3-Pole	1	ARE6353	23.50	ARE6373	25.70	.500 to .875	APJ6373	21.00	AR635	20.20	AR637 22.40
	1¼	ARE6354	23.70	ARE6374	25.90	.875 to 1.375	APJ6375	21.00			
4-Wire, 4-Pole	1¼	ARE6454	27.70	ARE6474	29.90	.500 to .875	APJ6473	23.00	AR645	24.20	AR647 26.40
	1½	ARE6455	27.90	ARE6475	30.10	.875 to 1.375	APJ6475	23.00			
60-Ampere—Style 2											
2-Wire, 3-Pole	1	ARE6363	$26.00	ARE6383	$28.20	.500 to .875	APJ6383	$23.50	AR636	$22.70	AR638 $24.90
	1¼	ARE6364	26.20	ARE6384	28.40	.875 to 1.375	APJ6385	23.50			
3-Wire, 4-Pole	1¼	ARE6464	30.20	ARE6484	32.40	.500 to .875	APJ6483	25.50	AR646	26.70	AR648 28.90
	1½	ARE6465	30.40	ARE6485	32.60	.875 to 1.375	APJ6485	25.50			

Condulet Body†

For AR Series, Form B

For AR and AJ Series, Form C

*20-ampere, 2-pole plugs and receptacles have binding screw terminals. All others have soldering terminals for line conductors and a pressure type terminal for the grounding conductor.

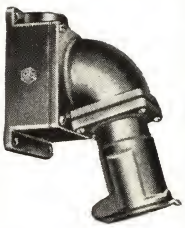
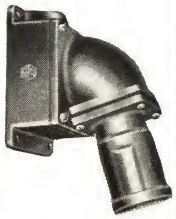
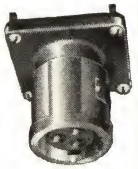
†Where other hub arrangements are desired, type AR receptacle housings can be used with Condulet bodies of AR and AJ series listed on another page.

‡Where non-watertight plugs are required, add Suffix NB to the above catalog numbers. The set of rubber bushings will then be omitted at the following reductions in list prices: 20-A., **$0.60**; 30-A, **$1.00**; 60-A., **$1.00**. *Housing with threaded cap only.

CROUSE-HINDS ARKTITE PLUGS AND RECEPTACLES

Weather Resistant (Raintight)*

60 and 100-Ampere—250 Volts D.C., 600 Volts A.C.

Type AREA Receptacle Equipment†						Type APJ Plugs			Type AR Receptacle Housings				
Style 1—Grounded Through Shell. Style 2—Grounded Through Extra Pole and Shell.						Receptacles will take any of the plugs grouped in the bracket opposite the receptacle listings. 							Condulet Body†
Description		Spring Door		Plain		With Mechanical Cable Grip and Rubber Bushing‡			Spring Door		Plain		
		Cat. No.	List	Cat. No.	List	Dia. Cable	Cat. No.	List	Cat. No.	List	Cat. No.	List	
60-Ampere—Style 1													
2-Wire, 2-Pole	1	AREA6213	$35.40	AREA6233	$32.90	.500 to .875	APJ6253	$17.50	AR621	$20.00	AR623	$17.50	For AR and AJ Series, Form C
	1¼	AREA6214	35.50	AREA6234	33.00	.875 to 1.375	APJ6255	17.50					
3-Wire, 3-Pole	1	AREA6313	37.40	AREA6333	34.90	.500 to .875	APJ6353	19.00	AR631	22.00	AR633	19.50	
	1¼	AREA6314	37.50	AREA6334	35.00	.875 to 1.375	APJ6355	19.00					
4-Wire, 4-Pole	1¼	AREA6414	41.50	AREA6434	39.00	.500 to .875	APJ6453	21.00	AR641	26.00	AR643	23.50	
	1½	AREA6415	41.60	AREA6435	39.10	.875 to 1.375	APJ6455	21.00					
60-Ampere—Style 2													
2-Wire, 3-Pole	1	AREA6323	$39.90	AREA6343	$37.40	.500 to .875	APJ6363	$21.50	AR632	$24.50	AR634	$22.00	
	1¼	AREA6324	40.00	AREA6344	37.50	.875 to 1.375	APJ6365	21.50					
3-Wire, 4-Pole	1¼	AREA6424	44.00	AREA6444	41.50	.500 to .875	APJ6463	23.50	AR642	28.50	AR644	26.00	
	1½	AREA6425	44.10	AREA6445	41.60	.875 to 1.375	APJ6465	23.50					
100-Ampere—Style 1													
2-Wire, 2-Pole	1¼	AREA10214	$41.50	AREA10234	$38.50	.875 to 1.375	APJ10255	$28.00	AR1021	$26.00	AR1023	$23.00	For AJ Series, Form D
	1½	AREA10215	41.60	AREA10235	38.60	1.375 to 1.875	APJ10257	28.00					
3-Wire, 3-Pole	1¼	AREA10314	43.50	AREA10334	40.50	.875 to 1.375	APJ10355	30.00	AR1031	28.00	AR1033	25.00	
	1½	AREA10315	43.60	AREA10335	40.60	1.375 to 1.875	APJ10357	30.00					
4-Wire, 4-Pole	1½	AREA10415	47.60	AREA10435	44.60	.875 to 1.375	APJ10455	34.00	AR1041	32.00	AR1043	29.00	
	2	AREA10416	47.70	AREA10436	44.70	1.375 to 1.875	APJ10457	34.00					
100-Ampere—Style 2													
2-Wire, 3-Pole	1¼	AREA10324	$46.50	AREA10344	$43.50	.875 to 1.375	APJ10365	$33.00	AR1032	$31.00	AR1034	$28.00	
	1½	AREA10325	46.60	AREA10345	43.60	1.375 to 1.875	APJ10367	33.00					
3-Wire, 4-Pole	1½	AREA10425	50.60	AREA10445	47.60	.875 to 1.375	APJ10465	37.00	AR1042	35.00	AR1044	32.00	
	.	AREA10426	50.70	AREA10446	47.70	1.375 to 1.875	APJ10467	37.00					

†Type AREA Condulets are square, and can therefore be mounted with the hub at top, bottom, right or left. When through-feed hubs or other adapters are desired, type AR receptacle housings can be used with Condulet bodies of AR and AJ series listed on another page.

‡Where non-watertight plugs are required, add Suffix NB to the above catalog numbers. The set of rubber bushings will then be omitted at the following reductions in list prices: 60-A., **$1.00**; 100-A., **$1.40.**

*Spring door housing only, when downwardly inclined.

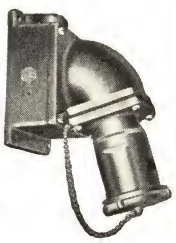
CROUSE-HINDS ARKTITE PLUGS AND RECEPTACLES

Weather Resistant (Raintight)*

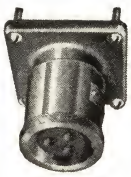
60 and 100-Ampere—250 Volts D.C., 600 Volts A.C.

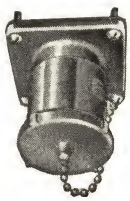
Style 1—Grounded Through Shell.
Style 2—Grounded Through Extra Pole and Shell.











Condulet Body†

Description	Type AREA Receptacle Equipment† Threaded Cat. No.	List	Type AREA Receptacle Equipment† With Cap Cat. No.	List	Type APJ Plugs With Mechanical Cable Grip and Rubber Bushing‡ Dia. Cable	Cat. No.	List	Type AR Receptacle Housings Threaded Cat. No.	List	Type AR Receptacle Housings With Cap Cat. No.	List
60-Ampere—Style 1											
2-Wire, 2-Pole	1	AREA6253	$33.60	AREA6273	$35.80	.500 to .875	APJ6273	$19.50	AR625	$18.20	AR627	$20.40
	1¼	AREA6254	33.70	AREA6274	35.90	.875 to 1.375	APJ6275	19.50				
3-Wire, 3-Pole	1	AREA6353	35.60	AREA6373	37.80	.500 to .875	APJ6373	21.00	AR635	20.20	AR637	22.40
	1¼	AREA6354	35.70	AREA6374	37.90	.875 to 1.375	APJ6375	21.00				
4-Wire, 4-Pole	1¼	AREA6454	39.70	AREA6474	41.90	.500 to .875	APJ6473	23.00	AR645	24.20	AR647	26.40
	1½	AREA6455	39.80	AREA6475	42.00	.875 to 1.375	APJ6475	23.00				
60-Ampere—Style 2											
2-Wire, 3-Pole	1	AREA6363	$38.10	AREA6383	$40.30	.500 to .875	APJ6383	$23.50	AR636	$22.70	AR638	$24.90
	1¼	AREA6364	38.20	AREA6384	40.40	.875 to 1.375	APJ6385	23.50				
3-Wire, 4-Pole	1¼	AREA6464	42.20	AREA6484	44.40	.500 to .875	APJ6483	25.50	AR646	26.70	AR648	28.90
	1½	AREA6465	42.30	AREA6485	44.50	.875 to 1.375	APJ6485	25.50				
100-Ampere—Style 1											
2-Wire, 2-Pole	1¼	AREA10254	$39.50	AREA10274	$43.50	.875 to 1.375	APJ10275	$31.00	AR1025	$24.00	AR1027	$28.00
	1½	AREA10255	39.60	AREA10275	43 60	1.375 to 1.875	APJ10277	31.00				
3-Wire, 3-Pole	1¼	AREA10354	41.50	AREA10374	45.50	.875 to 1.375	APJ10375	33.00	AR1035	26.00	AR1037	30.00
	1½	AREA10355	41.60	AREA10375	45.60	1.375 to 1.875	APJ10377	33.00				
4-Wire, 4-Pole	1½	AREA10455	45.60	AREA10475	49.60	.875 to 1.375	APJ10475	37.00	AR1045	30.00	AR1047	34.00
	2	AREA10456	45.70	AREA10476	49.70	1.375 to 1.875	APJ10477	37.00				
100-Ampere—Style 2											
2-Wire, 3-Pole	1¼	AREA10364	$44.50	AREA10384	$48.50	.875 to 1.375	APJ10385	$36.00	AR1036	$29.00	AR1038	$53.00
	1½	AREA10365	44.60	AREA10385	48.60	1.375 to 1.875	APJ10387	36.00				
3-Wire, 4-Pole	1½	AREA10465	48.60	AREA10485	52.60	.875 to 1.375	APJ10485	$40.00	AR1046	33.00	AR1048	37.00
	2	AREA10466	48.70	AREA10486	52.70	1.375 to 1.875	APJ10487	40.00				

For AR and AJ Series, Form C

For AJ Series, Form D

†Type AREA Condulets are square, and can therefore be mounted with the hub at top, bottom, right or left. When through-feed hubs or other adapters are desired, type AR receptacle housings can be used with Condulet bodies of AR and AJ series listed on another page.

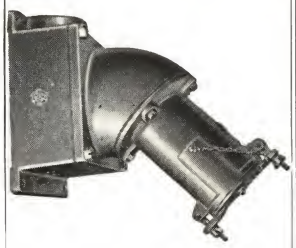
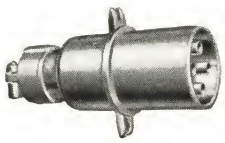
‡Where non-watertight plugs are required, add Suffix NB to the above catalog numbers. The set of rubber bushings will then be omitted at the following reductions in list prices: 60-A, **$1.00**; 100-A, **$1.40.**

*Housing with threaded cap only.

CROUSE-HINDS ARKTITE PLUGS AND RECEPTACLES

Weather Resistant (Raintight)

200-Ampere—250 Volts D.C., 600 Volts A.C.

Type AREA Receptacle Equipment†			Type AP Plugs			Type AR Receptacle Housings	
Style 1—Grounded Through Shell. Style 2—Grounded Through Extra Pole and Shell.			Receptacles will take any of the plugs grouped in the bracket opposite the receptacle listings. 				
Description	Clamp Cover		With Mechanical Cable Grip and Rubber Bushing			Clamp Cover	
	Cat. No.	List	Dia. Cable	Cat. No.	List	Cat. No.	List
200-Ampere—Style 1							
2-Wire, 2-Pole	1½	AREA20215	$87.90	.875 to 1.375	AP20255	$50.00	AR2021	$60.00
	2	AREA20216	88.10	1.375 to 1.875	AP20257	50.00		
				1.875 to 2.500	AP20258	50.00		
3-Wire, 3-Pole	1½	AREA20315	$89.90	.875 to 1.375	AP20355	$52.00	AR2031	$62.00
	2	AREA20316	90.10	1.375 to 1.875	AP20357	52.00		
	2½	AREA20317	90.30	1.875 to 2.500	AP20358	52.00		
4-Wire, 4-Pole	2	AREA20416	$96.10	.875 to 1.375	AP20455	$58.00	AR2041	$68.00
	2½	AREA20417	96.30	1.375 to 1.875	AP20457	58.00		
				1.875 to 2.500	AP20458	58.00		
200-Ampere—Style 2							
2-Wire, 3-Pole	1½	AREA20325	$93.90	.875 to 1.375	AP20365	$56.00	AR2032	$66.00
	2	AREA20326	94.10	1.375 to 1.875	AP20367	56.00		
	2½	AREA20327	94.30	1.875 to 2.500	AP20368	56.00		
3-Wire, 4-Pole	1½	AREA20425	$ 99.90	.875 to 1.375	AP20465	$62.00	AR2042	$72.00
	2	AREA20426	100.10	1.375 to 1.875	AP20467	62.00		
	2½	AREA20427	100.30	1.875 to 2.500	AP20468	62.00		

Condulet Body†

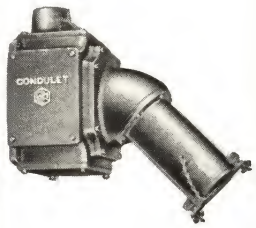
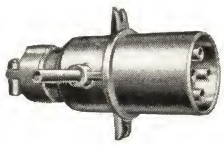
For AJ Series, Form E

†Type AREA Condulets are square and can therefore be mounted with the hub at top, bottom, right or left.

CROUSE-HINDS ARKTITE PLUGS AND RECEPTACLES

Weather Resistant (Raintight)

400-Ampere—250 Volts D.C., 600 Volts A.C.

Type AREX Receptacle Equipment†			Type AP Plugs			Type AR Receptacle Housings	
Style 1—Grounded Through Shell. Style 2—Grounded Through Extra Pole and Shell.			Receptacles will take any of the plugs grouped in the bracket opposite the receptacle listings.				
Description	Clamp Cover		With Mechanical Cable Grip and Rubber Bushing			Clamp Cover	
	Cat. No.	List	Dia. Cable	Cat. No.	List	Cat. No.	List
400-Ampere—Style 1—Soldering recess takes .84″ maximum conductor size‡							
2-Wire, 2-Pole	2	AREX40216	$203.80	1.375 to 1.875	AP40257	$100.00	AR4021	$120.00
	2½	AREX40217	204.30	1.875 to 2.500	AP40258	100.00		
	3	AREX40218	204.80					
3-Wire, 3-Pole	2½	AREX40317	212.30	1.375 to 1.875	AP40357	108.00	AR4031	128.00
	3	AREX40318	212.80	1.875 to 2.500	AP40358	108.00		
4-Wire, 4-Pole	2½	AREX40417	240.30	1.375 to 1.875	AP40457	126.00	AR4041	156.00
	3	AREX40418	240.80	1.875 to 2.500	AP40458	126.00		
400-Ampere—Style 2—Soldering recess takes .84″ maximum conductor size‡							
2-Wire, 3-Pole	2	AREX40326	$221.80	1.375 to 1.875	AP40367	$118.00	AR4032	$138.00
	2½	AREX40327	222.30	1.875 to 2.500	AP40368	118.00		
	3	AREX40328	222.80					
3-Wire, 4-Pole	2½	AREX40427	250.30	1.375 to 1.875	AP40467	136.00	AR4042	166.00
	3	AREX40428	250.80	1.875 to 2.500	AP40468	136.00		
400-Ampere—Style 1—Soldering recess takes 1.25″ maximum conductor size‡							
2-Wire, 2-Pole	3	AREX402128	$228.80	2.500 to 3.000	AP402510	$150.00	AR40212	$144.00
	3½	AREX402129	229.30	3.000 to 3.500	AP402512	150.00		
	4	AREX4021210	229.80					
3-Wire, 3-Pole	3	AREX403128	254.80	2.500 to 3.000	AP403510	176.00	AR40312	170.00
	3½	AREX403129	255.30	3.000 to 3.500	AP403512	176.00		
	4	AREX4031210	255.80					
4-Wire, 4-Pole	4	AREX4041210	299.80	2.500 to 3.000	AP404510	220.00	AR40412	214.00
	4½	AREX4041211	300.30	3.000 to 3.500	AP404512	220.00		
	5	AREX4041212	300.80					
400-Ampere—Style 2—Soldering recess takes 1.25″ maximum conductor size‡							
2-Wire, 3-Pole	3	AREX403228	$268.80	2.500 to 3.000	AP403610	$190.00	AR40322	$184.00
	3½	AREX403229	269.30	3.000 to 3.500	AP403612	190.00		
	4	AREX4032210	269.80					
3-Wire, 4-Pole	4	AREX4042210	313.80	2.500 to 3.000	AP404610	234.00	AR40422	228.00
	4½	AREX4042211	314.30	3.000 to 3.500	AP404612	234.00		
	5	AREX4042212	314.80					

Condulet Body†

For AJ Series and AJX with angle adapter, Form F

†Type AREX Condulet is a type AJX body with three blank plates and a one-hub plate. Other styles and sizes of conduit hub plates of the YYP9 series can be substituted at the difference in the list prices.

‡The wire and soldering recess sizes will determine the catalog numbers of the plug and of the receptacle to be used. Complete information on request.

AR SERIES CONDULETS

AR Series Condulets take Arktite receptacle housings.



Type ARRH

Size In.	Form B Condulets Take 20 and 30-Amp. Housings No.	Each	Form C Condulets Take 60-Amp. Housings No.	Each
½	ARRH13	$1.80	ARRH16	$2.60
¾	ARRH23	2.00	ARRH26	2.80
1	ARRH33	2.20	ARRH36	3.00
1¼	.....	.....	ARRH46	3.20
1½	.....	.....	ARRH56	3.40



Type ARRC

½	ARRC13	$2.00	ARRC16	$2.80
¾	ARRC23	2.20	ARRC26	3.00
1	ARRC33	2.40	ARRC36	3.20
1¼	.....	.....	ARRC46	3.40
1½	.....	.....	ARRC56	3.60



Type ARE

½	ARE13	$2.00	ARE16	$2.90
¾	ARE23	2.20	ARE26	3.10
1	ARE33	2.40	ARE36	3.30
1¼	.....	.....	ARE46	3.50
1½	.....	.....	ARE56	3.70



Type ARDF

½	ARDF13	$2.30	ARDF16	$3.20
¾	ARDF23	2.50	ARDF26	3.40
1	ARDF33	2.70	ARDF36	3.60
1¼	.....	.....	ARDF46	3.80
1½	.....	.....	ARDF56	4.00



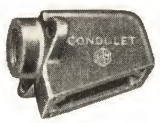
Type ARJ

½	ARJ13	$2.60	ARJ16	$3.50
¾	ARJ23	2.80	ARJ26	3.70
1	ARJ33	3.00	ARJ36	3.90
1¼	.....	.....	ARJ46	4.10
1½	.....	.....	ARJ56	4.30



Type ARD

½	ARD13	$2.90	ARD16	$3.80
¾	ARD23	3.10	ARD26	4.00
1	ARD33	3.30	ARD36	4.20
1¼	.....	.....	ARD46	4.40
1½	.....	.....	ARD56	4.60



Type ARJG

½	ARJG13	$2.40	ARJG16	$3.40
¾	ARJG23	2.60	ARJG26	3.60
1	ARJG33	2.80	ARJG36	3.80
1¼	.....	.....	ARJG46	4.00
1½	.....	.....	ARJG56	4.20



Type ARJK

½	ARJK13	$2.00	ARJK16	$2.90
¾	ARJK23	2.20	ARJK26	3.10
1	ARJK33	2.40	ARJK36	3.30
1¼	.....	.....	ARJK46	3.50
1½	.....	.....	ARJK56	3.70



Type ARJP

½	ARJP13	$2.00	ARJP16	$2.90
¾	ARJP23	2.20	ARJP26	3.10
1	ARJP33	2.40	ARJP36	3.30
1¼	.....	.....	ARJP46	3.50
1½	.....	.....	ARJP56	3.70



Type ARRA

½	ARRA13	$1.80	ARRA16	$2.60
¾	ARRA23	2.00	ARRA26	2.80
1	ARRA33	2.20	ARRA36	3.00
1¼	.....	.....	ARRA46	3.20
1½	.....	.....	ARRA56	3.40



15° Angle Adapters

For types ARRA, ARRC, and ARRH Condulets. Adapters listed below are furnished with gaskets and take Arktite receptacle housings

.....	AR30	$3.00	AR60	$4.00

AJ SERIES CONDULETS AND CONDUIT HUB PLATES



Type AJ With 60-Ampere Straight Adapter, Form C

Size, In.	No.	Each
¾	AJ23	$14.00
1	AJ33	14.10
1¼	AJ43	14.20
1½	AJ53	14.30
2	AJ63	14.40



Type AJC With 60-Ampere Straight Adapter, Form C

¾	AJC23	$14.30
1	AJC33	14.50
1¼	AJC43	14.70
1½	AJC53	14.90
2	AJC63	15.10



Type AJ With 100-Ampere Straight Adapter, Form D

¾	AJ24	$14.80
1	AJ34	14.90
1¼	AJ44	15.00
1½	AJ54	15.10
2	AJ64	15.20



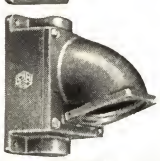
Type AJC With 100-Ampere Straight Adapter, Form D

¾	AJC24	$15.10
1	AJC34	15.30
1¼	AJC44	15.50
1½	AJC54	15.70
2	AJC64	15.90



Type AJ With 60 and 100-Ampere Angle Adapter, Forms C and D

¾	AJ27	$15.30
1	AJ37	15.40
1¼	AJ47	15.50
1½	AJ57	15.60
2	AJ67	15.70



Type AJC With 60 and 100-Ampere Angle Adapter, Forms C and D

¾	AJC27	$15.60
1	AJC37	15.80
1¼	AJC47	16.00
1½	AJC57	16.20
2	AJC67	16.40

Type AJ With 200-Ampere Angle Adapter, Form E

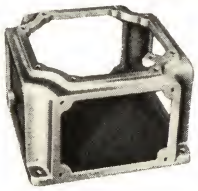
Size, In.	No.	Each
1½	AJ58	$27.90
2	AJ68	28.10
2½	AJ78	28.30

Type AJ With 400-Ampere Angle Adapter, Form F

Size, In.	No.	Each
2	AJ69	$63.10
2½	AJ79	63.30
3	AJ89	63.50

TYPE AJX

Furnished with Gaskets for Hub Plates Takes Four Hub Plates



Condulet

No.	Each	Rating	Series
AJX88	$19.10	200 Amp.	YYP8
AJX99	37.90	400 Amp.	YYP9



Adapter

No.	Each
AJ45	$12.10
AJ245	22.40

HUB PLATES



Hub Plate

Hub Size	No.	YYP8 Series Each	No.	Each
2½	YYP87	$2.30	YYP800	$0.80
		YYP9 Series		
2½	YYP97	7.50	YYP900	5.50
3	YYP98	8.00	.....	.....



Blank Plate

CROUSE-HINDS ARKTITE EXTENSION CABLE CONNECTORS

Style 1—Grounded Through Shell With Rubber Bushing—Watertight

Style 2—Grounded Through Extra Pole and Shell With Rubber Bushing—Watertight

30, 60 and 100 Amperes 250 Volts D.C., 600 Volts A.C.



30, 60 or 100 Amperes

Diam. Cable Inches	Complete No.	Complete Each	Receptacle Only No.	Receptacle Only Each	Plug Only No.	Plug Only Each
Style 1						
		30 Amperes 2-Wire, 2 Pole				
	APC-		APR-		APJ-	
.500 to .875	3253	$29.00	3253	$15.50	3273	$13.50
		3-Wire, 3-Pole				
.500 to .875	3353	31.40	3353	16.60	3373	14.80
		4-Wire, 4-Pole				
.500 to .875	3453	34.60	3453	18.20	3473	16.40
		5-Wire, 5-Pole				
.500 to .875	3553	39.50	3553	20.60	3573	18.90
		60 Amperes 2-Wire, 2-Pole				
.500 to .875	6253	45.70	6253	26.20	6273	19.50
.875 to 1.375	6255	45.70	6255	26.20	6275	19.50
		3-Wire, 3-Pole				
.500 to .875	6353	49.20	6353	28.20	6373	21.00
.875 to 1.375	6355	49.20	6355	28.20	6375	21.00
		4-Wire, 4-Pole				
.500 to .875	6453	55.20	6453	32.20	6473	23.00
.875 to 1.375	6455	55.20	6455	32.20	6475	23.00
		100 Amperes 2-Wire, 2-Pole				
.875 to 1.375	10255	70.00	10255	39.00	10275	31.00
1.375 to 1.875	10257	70.00	10257	39.00	10277	31.00
		3-Wire, 3-Pole				
.875 to 1.375	10355	74.00	10355	41.00	10375	33.00
1.375 to 1.875	10357	74.00	10357	41.00	10377	33.00
		4-Wire, 4-Pole				
.875 to 1.375	10455	82.00	10455	45.00	10475	37.00
1.375 to 1.875	10457	82.00	10457	45.00	10477	37.00
Style 2						
		30 Amperes 2-Wire, 3-Pole				
.500 to .875	3363	$35.40	3363	$18.60	3383	$16.80
.875 to 1.375	3365	35.40	3365	18.60	3385	16.80
		3-Wire, 4-Pole				
.500 to .875	3463	38.60	3463	20.20	3483	18.40
.875 to 1.375	3465	38.60	3465	20.20	3485	18.40
		4-Wire, 5-Pole				
.500 to .875	3563	45.70	3563	23.50	3583	22.20
		60 Amperes 2-Wire, 3-Pole				
.500 to .875	6363	54.20	6363	30.70	6383	23.50
.875 to 1.375	6365	54.20	6365	30.70	6385	23.50
		3-Wire, 4-Pole				
.500 to .875	6463	60.20	6463	34.70	6483	25.50
.875 to 1.375	6465	60.20	6465	34.70	6485	25.50
		100 Amperes 2-Wire, 3-Pole				
.875 to 1.375	10365	80.00	10365	44.00	10385	36.00
1.375 to 1.875	10367	80.00	10367	44.00	10387	36.00
		3-Wire, 4-Pole				
.875 to 1.375	10465	88.00	10465	48.00	10485	40.00
1.375 to 1.875	10467	88.00	10467	48.00	10487	40.00

CROUSE-HINDS TYPE BP PLUGS

For use with types BRD, BRG, BRME, BRP, BRY and plug receptacle housings. The 30-ampere plugs are arranged for soldered terminals. The 20-ampere plugs are equipped with binding screw terminals. Plugs so equipped with binding screw will not take wires larger than No. 12; consequently, these plugs are rated at 20 amperes. Otherwise, the 20 and 30-ampere plugs are exactly alike.

Grounding—Provision is made on these plugs for an extra grounding wire in the cable for grounding the frame of the portable device to the shell of the plug. The grounding or safety circuit is completed through the shell of the plug, the detent spring, the receptacle housing, and the conduit system. The detent spring in the receptacle has three branches, two of which make contact before and break contact after the main circuit contacts. This method of grounding is N. E. C. standard.

FOR FLEXIBLE CABLE

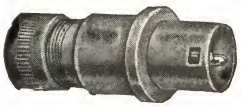
Without Clamping Nut

Furnished with cable clamp. With composition handle (non-watertight).



Diam. Opening in Cable Clamp, In.	2-Pole No.	2-Pole Each
	***20 Amperes, 250 Volts A.C.**	
†.500 to .844	BP22	$7.20
	‡30 Amperes, 250 Volts A.C.	
†.500 to .844	BP32	7.20

Without Clamping Nut



Furnished with gland nut, tapered rubber bushing, and cast aluminum handles.

Diam. Opening in Cable Clamp, In.	2-Pole No.	2-Pole Each	3-Pole No.	3-Pole Each	4-Pole No.	4-Pole Each
			***20 Amperes, 250 Volts A.C.**			
	BP-		BP-		BP-	
.375 to .500	6422	$6.80	6423	$8.30	6424	$ 9.80
.500 to .625	6522	7.20	6523	8.70	6524	10.20
.625 to .750	6622	7.60	6623	9.10	6624	10.60
.750 to .875	6722	8.00	6723	9.50	6724	11.00
.875 to 1.000	.....	.....	6823	9.90	6824	11.40
			‡30 Amperes, 250 Volts A.C.			
.375 to .500	6432	$6.80	6433	$8.30	6434	$ 9.80
.500 to .625	6532	7.20	6533	8.70	6534	10.20
.625 to .750	6632	7.60	6633	9.10	6634	10.60
.750 to .875	6732	8.00	6733	9.50	6734	11.00
.875 to 1.000	.....	.....	6833	9.90	6834	11.40



With Clamping Nut

Furnished with gland nut, tapered rubber bushing, and cast aluminum handles.

	***20 Amperes, 250 Volts A.C.**		
	BP-	BP-	BP-
.375 to .500	8422 $7.80	8423 $9.80	8424 $11.80
.500 to .625	8522 8.20	8523 10.20	8524 12.20
.625 to .750	8622 8.60	8623 10.60	8624 12.60
.750 to .875	8722 9.00	8723 11.00	8724 13.00
.875 to 1.000	....	8823 11.40	8824 13.40
	‡30 Amperes, 250 Volts A.C.		
.375 to .500	8432 $7.80	8433 $9.80	8434 $11.80
.500 to .625	8532 8.20	8533 10.20	8534 12.20
.625 to .750	8632 8.60	8633 10.60	8634 12.60
.750 to .875	8732 9.00	8733 11.00	8734 13.00
.875 to 1.000	....	8833 11.40	8834 13.40

*Can be used on 20-ampere, 125-volt d.c. circuits; or on 20-ampere, 250-volt d.c. circuits if circuit is broken before plug is withdrawn.

†Clamp opening ½ to 27/32 inch takes most of the 2-wire and 3-wire rubber sheathed, fabric sheathed, and deck cables No. 14 to No. 8.

‡Can be used on 25-ampere, 125-volt d.c. circuits; or on 30-ampere, 250-volt d.c. circuits if circuit is broken before plug is withdrawn.

TYPE BRC EXTENSION CABLE CONNECTORS

With Rubber Bushings (Watertight)—Cast Aluminum

*30 Amperes, 250 Volts, A.C.



2-Pole

Diameter Cable, In.	Complete No.	Complete Each	Receptacle Only No.	Receptacle Only Each	Plug Only No.	Plug Only Each
	BRC-		BRM-		BP-	
.375- .500	8432	$14.80	70432	$7.00	8432	$7.80
.500- .625	8532	15.30	70532	7.10	8532	8.20
.625- .750	8632	16.10	70632	7.50	8632	8.60
.750- .875	8732	16.90	70732	7.90	8732	9.00
3-Pole						
.375- .500	8433	$17.70	70433	$7.90	8433	$9.80
.500- .625	8533	18.20	70533	8.00	8533	10.20
.625- .750	8633	19.00	70633	8.40	8633	10.60
.750- .875	8733	19.80	70733	8.80	8733	11.00
.875-1.000	8833	20.60	70833	9.20	8833	11.40
4-Pole						
.375- .500	8434	$20.60	70434	$8.80	8434	11.80
.500- .625	8534	21.10	70534	8.90	8534	12.20
.625- .750	8634	21.90	70634	9.30	8634	12.60
.750- .875	8734	22.70	70734	9.70	8734	13.00
.875-1.000	8834	23.50	70834	10.10	8834	13.40

†TYPE BRME 30° ANGLE PLUG RECEPTACLE CONDULETS

30-A., 250-V., A.C.*



Spring Door



Without Spring Door



Threaded Cap

Size In.	No. Poles	Spring Door No.	Spring Door Each	Without Spring Door No.	Without Spring Door Each	Threaded Cap†† No.	Threaded Cap†† Each
		BRME-		BRME-		BRME-	
½	2	61302	$7.50	1302	$5.00	81302	$7.30
¾	2	62302	7.70	2302	5.20	82302	7.50
¾	3	62303	8.90	2303	6.40	82303	9.60
1	3	63303	9.10	3303	6.60	83303	9.80
¾	4	62304	12.30	2304	7.80	82304	11.50
1	4	63304	12.50	3304	8.00	83304	11.70

†TYPE BRP PLUG RECEPTACLE HOUSINGS

For Outlet Boxes—Surface or Flush Mounting

25-A., 125-V. D.C.—30-A., 250-V. A.C.







For Outlet Boxes, Size	Poles	Without Spring Door No.	Without Spring Door Each	Spring Door No.	Spring Door Each	Threaded Cap†† No.	Threaded Cap†† Each
		BRP-		BRP-		BRP-	
3¼	2	3023	$5.00	63023	$8.20	83023	$7.30
3¼	3	3033	6.50	63033	10.10	83033	9.70
3¼	4	3043	7.80	63043	11.80	83043	11.90
4	2	3024	5.30	63024	8.50	83024	7.60
4	3	3034	6.80	63034	10.40	83034	10.00
4	4	3044	8.10	63044	12.10	83044	12.20

*Can be used on 25-ampere, 125-volt d.c. circuits; or on 30-ampere, 250-volt d.c. circuits if circuit is broken before plug is withdrawn. †Take type BP plugs.

The 2-pole Condulets are furnished with 30-ampere, 250-volt receptacle BR2302; 3-pole Condulets are furnished with 30-ampere, 250-volt receptacle BR2303; 4-pole Condulets are furnished with 30-ampere, 250-volt receptacle BR2304.

††Furnished with Gaskets.

CROUSE-HINDS CONDULETS

FSQ SERIES INTERLOCKED PLUG RECEPTACLE AND SWITCH CONDULET

Explosion-Proof and Dust-Tight

Class I, Groups C and D; Class II, Group G; and Class III

2-Wire, 3-Pole {30-Ampere, 250-V. A.C. or D.C. 2-Hp., 230-V., 1-Hp., 460-V. A.C.

3-Wire, 4-Pole {30-Amp., 250-V. or 20-Amp., 600-V. A.C. 2-Hp., 115-575 V. A.C.



Type FSQC, with Threaded Housing



Type FSQC, with Spring Door



Type FSQ

Furnished with tumbler type switch and receptacle, either with threaded housing or spring door housing.

Take FP and BP plugs.



Type FSQC

Size Hub In.	No. of Poles	*Form	Type FSQ No.	Type FSQ Each	Type FSQC No.	Type FSQC Each
			With Threaded Housing			
¾	2-W., 3-P.	E	232	$46.00	232	$46.00
1			332	46.40	332	46.40
¾	3-W., 4-P.	F	233	52.00	233	52.00
1			333	52.40	333	52.40
			With Spring Door Housing			
¾	2-W., 3-P.	B	230	46.00	230	46.00
1			330	46.40	330	46.40

*Order by number.

PLUGS FOR FSQ SERIES CONDULETS



Type FP



Type BP

Furnished with cable grip and rubber bushing. Grounded through extra pole and shell. Made of cast aluminum.

Type FP—For Threaded Housings

No.	Each	No. of Poles	Dia. Cable Ins.
FP323	$12.00	2-Wire, 3-Pole	.500 to .875
FP334	14.00	3-Wire, 4-Pole	.500 to .875

Type BP—For Spring Door Housings

BP49	12.00	2-Wire, 3-Pole	.375 to .500
BP59	12.00	2-Wire, 3-Pole	.500 to .625
BP69	12.00	2-Wire, 3-Pole	.625 to .750
BP79	12.00	2-Wire, 3-Pole	.750 to .875

Type FSQ Interlocked Receptacle and Switch Condulet



Furnished with 2-Pole Switch and 2-Wire, 3-Pole Receptacle

10-Amp., 250-V., A.C. or D.C.

2-Wire, 3-Pole

Size	Cat. No.	List Each
¾	FSQ223	$36.00

Type FP Plug For Type FSQ Condulet

Furnished with cable grip and rubber bushing. Grounded through extra pole and shell.



10-Amp., 250-V., A.C. or D.C. 2-Wire, 3-Pole

Dia. Cable	Cat. No.	List Each
.375 to .500	FP23	$8.00

CROUSE-HINDS CONDULETS

TYPE EPC CIRCUIT BREAKER CONDULET

With Interlocking Arktite Plug Receptacle

Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)

Class I, Group D (NEMA Type VII); Class II, Group G; and Class III (NEMA Types IX, V, and III)



Take Type APJ Arktite Plugs

For use wherever power outlets combined with over-current protection are required. They may be employed for supplying motor-operated portable appliances up to the maximum horsepower for which the circuit breakers are suitable.

The receptacle is so interlocked with the circuit breaker that the plug cannot be withdrawn unless the breaker is open; and the breaker cannot be closed unless the plug is fully inserted.

60-Ampere, 3-Wire, 4-Pole
Style 2 Plug Receptacle with Spring Door Housing
100-Ampere Frame Size Circuit Breaker with Non-Interchangeable Thermal Trip and Non-Adjustable Magnetic Trip

Condulet Without Circuit Breaker

Volts	Amps.	Size Hub	Cat. No.	List Each
250-V.	15 — 50	1¼	EPC46242	$150.00
	70*—100	2	EPC66342	180.00
600-V.	15 — 50	1¼	EPC46642	150.00
	70*—100	2	EPC66742	180.00

Condulet With Circuit Breaker

Size Hubs	Amps.	Westinghouse Cat. No.	Trumbull Cat. No.	List Each
		250-V., A.C. or 125-250-V., D.C.—3-Pole		
		EPC-	EPC-	
	15	46242-WT15-3	46242-TT15-3	$189.80
	20	46242-WT20-3	46242-TT20-3	189.80
1¼	30	46242-WT30-3	46242-TT30-3	189.80
	40	46242-WT40-3	46242-TT40-3	189.80
	50	46242-WT50-3	46242-TT50-3	189.80
	70*	66342-WT70-3	66342-TT70-3	239.70
2	90	66342-WT90-3	66342-TT90-3	239.70
	100	66342-WT100-3	66342-TT100-3	239.70
		600-V., A.C.—3-Pole		
	15	46642-WT15-3	46642-TT15-3	209.70
	20	46642-WT20-3	46642-TT20-3	209.70
1¼	30	46642-WT30-3	46642-TT30-3	209.70
	40	46642-WT40-3	46642-TT40-3	209.70
	50	46642-WT50-3	46642-TT50-3	209.70
	70*	66742-WT70-3	66742-TT70-3	257.35
2	90	66742-WT90-3	66742-TT90-3	257.35
	100	66742-WT100-3	66742-TT100-3	257.35

Type APJ Arktite Plug
With Mechanical Cable Grip and Rubber Bushing
60-Ampere, 3-Wire, 4-Pole
250-V., D.C. or 600-V., A.C.

Style	Dia. Cable	Cat. No.	List Each
2	.500 to .875	APJ6463	$23.50
	.875 to 1.375	APJ6465	23.50

*Can be furnished in smaller Condulet with 1¼ inch hubs. Prices upon application.

CROUSE-HINDS CONDULETS

TYPE DBR CIRCUIT BREAKER CONDULET

With Interlocking Arktite Plug Receptacle

Dust-Tight and Weather Resistant (Raintight) Class II, Group G; and Class III (NEMA Types IX, V, and III)

Take Type APJ Arktite Plugs



For use wherever power outlets combined with over-current protection are required. They may be employed for supplying motor-operated portable appliances up to the maximum horsepower for which the circuit breakers are suitable.

The receptacle is so interlocked with the circuit breaker that the plug cannot be withdrawn unless the breaker is open; and the breaker cannot be closed unless the plug is fully inserted.

60-Ampere, 3-Wire, 4-Pole
Style 2
Plug Receptacle with Spring Door Housing

100-Ampere Frame Size Circuit Breaker with Non-Interchangeable Thermal Trip and Non-Adjustable Magnetic Trip

Condulet Without Circuit Breaker

Circuit Breaker Poles and Volts	Size Hub†	Cat. No.	List Each
3-Pole, 250-V., A.C. or 125-250-V., D.C.	1½	DBR56342	$110.00
3-Pole, 600-V., A.C.	1½	DBR56742	110.00

Condulet With Circuit Breaker

†Size Hubs	Amps.	Westinghouse Cat. No.	Trumbull Cat. No.	List Each
		250-V., A.C. or 125-250-V., D.C.—3-Pole		
		DBR-	DBR-	
	15	56342-WT15-3	56342-TT15-3	$149.80
	20	56342-WT20-3	56342-TT20-3	149.80
	30	56342-WT30-3	56342-TT30-3	149.80
1½	40	56342-WT40-3	56342-TT40-3	149.80
	50	56342-WT50-3	56342-TT50-3	149.80
	70	56342-WT70-3	56342-TT70-3	169.70
	90	56342-WT90-3	56342-TT90-3	169.70
	100	56342-WT100-3	56342-TT100-3	169.70
		600-V., A.C.—3-Pole		
	15	56742-WT15-3	56742-TT15-3	169.70
	20	56742-WT20-3	56742-TT20-3	169.70
	30	56742-WT30-3	56742-TT30-3	169.70
1½	40	56742-WT40-3	56742-TT40-3	169.70
	50	56742-WT50-3	56742-TT50-3	169.70
	70	56742-WT70-3	56742-TT70-3	187.35
	90	56742-WT90-3	56742-TT90-3	187.35
	100	56742-WT100-3	56742-TT100-3	187.35

†Furnished with one drilled and tapped conduit opening at the top equipped with threaded-in bushing. Removal of the bushing permits the use of the opening for the next larger size conduit. Other sizes or arrangements of conduit openings can be furnished. Prices on application.

CROUSE-HINDS CONDULETS

Explosion-Proof and Dust-Tight

Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, and V)

EFD SERIES MANUAL MOTOR STARTING SWITCH CONDULETS

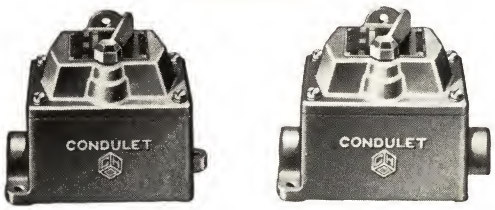
Furnished with either General Electric or Trumbull manual motor starting switches. Heaters are interchangeable and therefore may be used with either switch.

Maximum Horsepower Ratings: G.E. and Trumbull

Poles	115-230 Volts A.C.	32 Volts D.C.	115 Volts D.C.	230 Volts D.C.
1	1 H.P.	¼ H.P.	¾ H.P.	⅓ H.P.
2	1 H.P.	¼ H.P.	1 H.P.	1 H.P.

Dead End **Through Feed**

Single-Gang



Cat. No.	List, Each	Poles	Size Hub	Form ★	Cat. No.	List, Each
EFD-					EFDC-	
1181-*	$16.20	1	½	81	1181-*	$16.40
2181-*	16.30		¾		2181-*	16.60
3181-*	16.50		1		3181-*	17.00
1182-*	17.20	2	½	82	1182-*	17.40
2182-*	17.30		¾		2182-*	17.60
3182-*	17.50		1		3182-*	18.00

EFD SERIES MOTOR SENTINEL CONDULETS

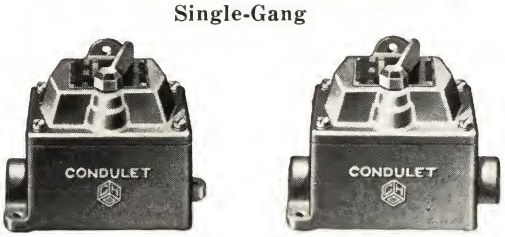
Furnished with Motor Sentinels.

Maximum Horsepower Ratings:

Poles	115-230 Volts A.C.	32 Volts D.C.	125 Volts D.C.	250 Volts D.C.
1	1 H.P.	¼ H.P.	1 H.P.	¼ H.P.
2	1 H.P.	¼ H.P.	1 H.P.	1 H.P.

Dead End **Through Feed**

Single-Gang



Cat. No.	List, Each	Poles	Size Hub	Cat. No.	List, Each
EFD-				EFDC-	
11101-*	$16.20	1	½	11101-*	$16.40
21101-*	16.30		¾	21101-*	16.60
31101-*	16.50		1	31101-*	17.00
11102-*	17.20	2	½	11102-*	17.40
21102-*	17.30		¾	21102-*	17.60
31102-*	17.50		1	31102-*	18.00

*Order by catalog number. Use type and form number for identification of Condulets for hazardous locations when consulting Underwriters' Laboratories, Inc., List of Inspected Electrical Equipment.

*List prices include switch or Motor Sentinel with one heater. Specify full load motor current.

CROUSE-HINDS CONDULETS

FD SERIES MOTOR SENTINEL CONDULETS

Watertight

NEMA Types III, IV, and V

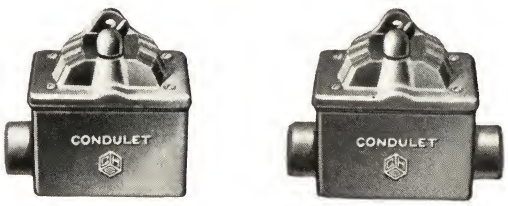
Furnished with Motor Sentinel.

Maximum Horsepower Ratings

Poles	115-230 Volts A.C.	32 Volts D.C.	125 Volts D.C.	250 Volts D.C.
1	1 H.P.	¼ H.P.	1 H.P.	¼ H.P.
2	1 H.P.	¼ H.P.	1 H.P.	1 H.P.

Dead End† **Through Feed†**

Single-Gang

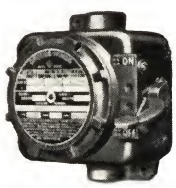


Cat. No.	List Each	Poles	Size Hub	Cat. No.	List Each
FD1211-*	$12.00	1	½	FDC1211-*	$12.20
FD2211-*	12.20		¾	FDC2211-*	12.60
FD3211-*	12.50		1	FDC3211-*	13.00
FD1212-*	13.00	2	½	FDC1212-*	13.20
FD2212-*	13.20		¾	FDC2212-*	13.60
FD3212-*	13.50		1	FDC3212-*	14.00

TYPE GUSC LINE STARTER CONDULETS

Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)

Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, V, and III)



Furnished with across-the-line manual motor starting switches for starting D.C. or single and polyphase A.C. motors.

They provide thermal relay time limit overload protection but do not provide undervoltage or short circuit protection.

They are furnished with ¾-inch through-feed hubs for threaded conduit, and external mounting lugs with fastening holes.

Motor Starting Switch Information

Size	Poles	Phase	Horsepower Ratings A.C. 110 V.	A.C. 220 V.	D.C. 115 V.	D.C. 230 V.	Cat. No.	List Each
							GUSC-	
	1	1	1	1½	½	¾	2081-AH-*	$28.00
	2	1	1	1½	1	1½	2092-AH-*	38.00
0	3	3 & 2	1½	2	....	....	2123-AH-*	44.00
	4	2	1½	2	....	....	2124-AH-*	56.00

†Other hub arrangements or hub sizes can be furnished by using Condulet bodies of the FD series, with special tapping for larger cover screws. Prices on application.

*List prices include necessary heaters. Specify full load motor current.

CROUSE-HINDS CONDULETS

TYPE FLF LINE STARTER CONDULETS

Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)

Class I, Group D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, V, and III)

Manual Across-the-Line Motor Starters Sizes 0 and 1



Type FLF Condulet For Square D Starters Class 2510

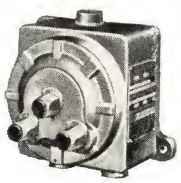
FLF103 and FLF189 Condulets have two 1-inch through-feed conduit hubs. FLF303 and FLF389 have one hub at top and two at bottom. The 1-inch size as listed is standard and will be supplied unless otherwise specified. Other hub arrangements can be furnished; prices on application.

Square D Starters — Class 2510

Size	Poles	Max. H.P. 110 V.	Max. H.P. 208-220 V.	Max. H.P. 440-550 V.	Condulet With Starter Cat. No.	Condulet With Starter List Each	Condulet Without Starter Cat. No.	Condulet Without Starter List Each
					FLF-		FLF-	
	2 (1 Ph.)	1	1½	1½	103-D21	$57.95	103	$36.00
					303-D21	57.95	303	36.00
0	3 (3 Ph.)	1½	2	2	103-D33	58.30	103	36.00
					303-D33	58.30	303	36.00
	2 (D. C.)	1	1	..	103-D20	57.95	103	36.00
					303-D20	57.95	303	36.00
	2 (1 Ph.)	1½	3	5	189-D21	67.75	189	40.00
					389-D21	67.75	398	40.00
1	3 (3 Ph.)	3	5	7½	189-D33	70.40	189	40.00
					389-D33	70.40	389	40.00
	2 (D. C.)	1½	2	..	189-D20	67.75	189	40.00
					389-D20	67.75	389	40.00

TYPE GUB LINE STARTER CONDULETS

Magnetic Across-the-Line Motor Starters



Furnished with external levers or push buttons for operating manual reset overload relays.

Starters are opened and closed by push button "start-stop" stations located at convenient points. Types EFD, EFS, and EGP series air break push button stations and type OFC oil immersed push button stations are recommended for this service.

¾-inch threaded hubs with integral bushing, two on the bottom and one on the top, are supplied. Other sizes, arrangements or union hubs can be furnished if specified. Prices on application.

Square D Starters — Class 8536

3 Phase, 60 Cycle

Size‡	Max. H.P. 208-220V.	Max. H.P. 440-480V.	Condulet With Starter 208-220V. ** Cat. No.	Condulet With Starter 440-480V. ** Cat. No.	List Each	Condulet Without Starter Cat. No.	Condulet Without Starter List Each
			GUB182-	GUB182-		GUB-	
0	2	2	D6230	D6430	$102.95	182	$60.00
1	5	7½	D6231	D6431	109.50	182	60.00

**Also available for 110 and 550 volts at the same prices.

‡For larger starters and Combination Starters refer to listings of Type EPC Condulets.

Ordering Information: When ordering complete type FLF or GUB Line Starter Condulets, give complete catalog number and specify H.P., voltage, frequency, number of phases, R.P.M., type, and full load ampere rating of motor. If complete motor data is not available, specify ampere rating of heater required.

Heater: Two-pole motor starters are furnished with one heater; three-pole starters and four-pole starters are furnished with two heaters.

CROUSE-HINDS CONDULETS

TYPE EPC COMBINATION LINE STARTER CONDULETS

Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)

Class I, Group D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, V, and III)

Square D Magnetic Across-the-Line Starters and Air Break Circuit Breakers



Type EPC Combination Line Starter Condulet Air Break

Maximum safety and ease of installation and maintenance in hazardous locations is obtained by the use of EPC Combination Starters. These weathertight, corrosion-resisting Condulet enclosures are for use in any location.

The combination starter provides circuit breaker disconnect with short circuit and overload protection for the motor circuit plus undervoltage release and overhead protection for the motor. The minimum installation expense is obtained by installing this complete unit control instead of using separate enclosures for the breaker and starter.

Air Break Starters†—208-220 Volts**

Condulet With Starter and Circuit Breaker

Size	Max. H.P.	Amp.*	Size Hubs	Cat. No.	List Each
0	2	15	1¼	EPC10148-DT15-D623	$205.00
1	5	30	1¼	EPC10148-DT30-D623	211.55
2	10	50	1½	EPC10149-DT50-D623	290.75
2	15	70	1½	EPC10162-DT70-D623	318.40
3	30	100	2½	EPC10163-DT100-D623	501.60
3	30	125	2½	EPC10146-DT125-D623	627.80
4	50	225	2½	EPC10147-DT225-D623	864.20

Condulet Without Starter and Circuit Breaker

0	2	15	1¼	EPC10148	130.00
1	5	30	1¼	EPC10148	130.00
2	10	50	1½	EPC10149	170.00
2	15	70	1½	EPC10162	170.00
3	30	100	2½	EPC10163	300.00
3	30	125	2½	EPC10146	300.00
4	50	225	2½	EPC10147	400.00

Air Break Starters—440-480 Volts**

Condulet With Starter and Circuit Breaker

0	2	15	1¼	EPC10161-DT15-D643	232.65
1	3	15	1¼	EPC10161-DT15-D643	239.20
1	7½	30	1¼	EPC10161-DT30-D643	239.20
2	10	30	1½	EPC10162-DT30-D643	318.40
2	25	50	1½	EPC10162-DT50-D643	318.40
2	25	70	1½	EPC10134-DT70-D643	336.05
3	50	100	2½	EPC10135-DT100-D643	519.25
3	50	125	2½	EPC10146-DT125-D643	659.30
4	75	150	2½	EPC10147-DT150-D643	895.70
4	100	200	2½	EPC10147-DT200-D643	895.70

Condulet Without Starter and Circuit Breaker

0	2	15	1¼	EPC10161	130.00
1	3	15	1¼	EPC10161	130.00
1	7½	30	1¼	EPC10161	130.00
2	10	30	1½	EPC10162	170.00
2	25	50	1½	EPC10162	170.00
2	25	70	1½	EPC10134	170.00
3	50	100	2½	EPC10135	300.00
3	50	125	2½	EPC10146	300.00
4	75	150	2½	EPC10147	400.00
4	100	200	2½	EPC10147	400.00

*Circuit breakers are selected for average motors.

**Also available for 110 and 550 volts. Information on request.

Push button stations are not included. Types EFD, EFS, EGP, and OFC are recommended.

Ordering Information: When ordering give complete catalog number and specify H.P., voltage frequency, number of phases, R.P.M., type and full-load ampere rating of motor.

†Similar Condulets with oil immersed starters are also available.

CROUSE-HINDS CONDULETS

TYPE EPC LINE STARTER CONDULETS

Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)

Class I, Group D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, V, and III)

Square D Magnetic Across-the-Line Motor Starters Air Break — Class 8536 — 3-Phase, 60-Cycle



Type EPC Line Starter Condulet Air Break

Air break starters have thermal overload relays arranged for manual reset. For this purpose, a reset push button is mounted upon the front of the body.

The starters are opened and closed by push button "start-stop" stations located at convenient points. Types EFD, EFS, and EGP series air break push button stations and type OFC oil immersed push button stations are recommended for this service.

Push button stations are not included.

Size	Max. H.P.	Size Hubs	Condulet With Starter Cat. No.	List Each	Condulet Without Starter Cat. No.	List Each
			208-220 Volts**			
			EPC-		**EPC-**	
0	2	1¼	**615-D623**	**$132.95**	**615**	**$90.00**
1	5	1¼	**615-D623**	**139.50**	**615**	**90.00**
2	15	1½	**616-D623**	**228.70**	**616**	**140.00**
3	25	2½	**617-D623**	**381.90**	**617**	**240.00**
4	50	2½	**627-D623**	**518.30**	**627**	**240.00**
			440-480 Volts**			
0	2	1¼	**615-D643**	**132.95**	**615**	**90.00**
1	7½	1¼	**615-D643**	**139.50**	**615**	**90.00**
2	25	1½	**616-D643**	**228.70**	**616**	**140.00**
3	50	2½	**617-D643**	**381.90**	**617**	**240.00**
4	50	2½	**627-D643**	**518.30**	**627**	**240.00**

TYPE GUSC AUXILIARY CIRCUIT BREAKER CONDULETS

Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)

Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IX, V, and III)

Furnished with Heinemann #0131 Electro-Magnetic Auxiliary Breaker



Auxiliary Breaker Information

Poles	Volts	Rating 1 H.P. A.C. Max.	Size	Condulet With Breaker Cat. No.	List Each
1	115 A.C.	¼ to 1-A	¾	**2041-11-†**	**$31.50**
		1 to 35-A		**2041-13-†**	**30.00**
	230 A.C.	¼ to 1-A		**2041-31-†**	**31.50**
		1 to 35-A		**2041-33-†**	**30.00**
	250 D.C.	¼ to 1-A		**2041-51-†**	**33.00**
		1 to 35-A		**2041-53-†**	**31.50**

**Also available for 110 and 550 volts. Information on request.

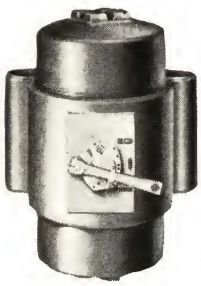
†Insert ampere rating required (any rating within limits shown in listing above). Example: Cat. No. GUSC2041-13-2 covers a Condulet with auxiliary breaker for 115 volts A.C. and with 2 ampere rating.

CROUSE-HINDS CONDULETS

TYPE EPC CIRCUIT BREAKER CONDULETS

Square D Air Break Circuit Breakers

Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)



Class I, Group D (NEMA Type VII); Class II, Groups E, F, and G; Class III (NEMA Types IX, V, and III)

These Condulets with air break circuit breakers are suitable for service entrance, feeder, or branch circuit protection, for lighting, appliance, and motor circuit conductors.

For manual closing, opening, or resetting, an external handle is provided.

Four threaded hubs are provided, two at the top and two at the bottom.

50-Ampere Frame Size with Non-Interchangeable Thermal Trip and Non-Adjustable Magnetic Trip

Amps.	Size Hubs	Condulet With Breaker Cat. No.	List Each	Condulet Without Breaker Cat. No.	List Each
		250-V. A.C. or 125-250-V. D.C. — Two Pole			
15		**EPC434-DT15-2**	**$ 91.60**		
20		**EPC434-DT20-2**	**91.60**		
30	1	**EPC434-DT30-2**	**91.60**	**EPC434**	**$70.00**
40		**EPC434-DT40-2**	**91.60**		
50		**EPC434-DT50-2**	**91.60**		
		250-V. A.C. or 125-250-V. D.C. — Three Pole			
15		**EPC435-DT15-3**	**122.05**		
20		**EPC435-DT20-3**	**122.05**		
30	1¼	**EPC435-DT30-3**	**122.05**	**EPC435**	**$90.00**
40		**EPC435-DT40-3**	**122.05**		
50		**EPC435-DT50-3**	**122.05**		
		600-V. A.C. — Three Pole			
15		**EPC441-DT15-2**	**149.70**		
20		**EPC441-DT20-2**	**149.70**		
30	1¼	**EPC441-DT30-2**	**149.70**	**EPC441**	**$90.00**
40		**EPC441-DT40-2**	**149.70**		
50		**EPC441-DT50-2**	**149.70**		

100-Ampere Frame Size with Non-Interchangeable Thermal Trip and Non-Adjustable Magnetic Trip

Amps.	Size Hubs	Condulet With Breaker Cat. No.	List Each	Condulet Without Breaker Cat. No.	List Each
		250-V. A.C. or 125-250-V. D.C. — Two Pole			
70*		**EPC437-DT70-2**	**165.40**	**EPC437**	**$120.00**
100		**EPC437-DT100-2**	**165.40**		
		250-V. A.C. — Three Pole			
70*		**EPC437-DT70-3**	**179.70**	**EPC437**	**$120.00**
100		**EPC437-DT100-3**	**179.70**		
		600-V. A.C. — Three Pole			
70*		**EPC427-DT70-3**	**197.35**	**EPC427**	**$120.00**
100		**EPC427-DT100-3**	**197.35**		

225-Ampere Frame Size with Interchangeable Thermal-Magnetic Trip

Amps.	Size Hubs	Condulet With Breaker Cat. No.	List Each	Condulet Without Breaker Cat. No.	List Each
		250-V. A.C. or 125-250-V. D.C. — Two Pole			
125		**EPC430-DT125-2**	**381.60**		
150		**EPC430-DT150-2**	**381.60**		
175	3	**EPC430-DT175-2**	**381.60**	**EPC430**	**$230.00**
200		**EPC430-DT200-2**	**381.60**		
225		**EPC430-DT225-2**	**381.60**		

*Can be furnished in smaller Condulet with 1¼" hubs. Prices on application.

CROUSE-HINDS CONDULETS

TYPE EPC CIRCUIT BREAKER CONDULETS

Square D Air Break Circuit Breakers

Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)

Class I, Group D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IX, V, and III)

225-Ampere Frame Size with Interchangeable Thermal-Magnetic Trip

Amps.	Size Hubs	Condulet With Breaker Cat. No.	List Each	Condulet Without Breaker Cat. No.	List Each
		250-V. A.C. or 125-250-V. D.C. — Three Pole			
125		EPC430-DT125-3	$415.90		
150		EPC430-DT150-3	415.90		
175	3	EPC430-DT175-3	415.90	EPC430	$230.00
200		EPC430-DT200-3	415.90		
225		EPC430-DT225-3	415.90		
		600-V. A.C. — Three Pole			
125		EPC431-DT125-3	447.40		
150		EPC431-DT150-3	447.40		
175	3	EPC431-DT175-3	447.40	EPC431	230.00
200		EPC431-DT200-3	447.40		
225		EPC431-DT225-3	447.40		

600-Ampere Frame Size with Interchangeable Thermal-Magnetic Trip

		250-V. A.C. or 125-250-V. D.C. — Two Pole			
250		EPC446-DT250-2	879.00		
275		EPC446-DT275-2	879.00		
300		EPC446-DT300-2	879.00		
325		EPC446-DT325-2	879.00		
350	4	EPC446-DT350-2	879.00	EPC446	500.00
400		EPC446-DT400-2	879.00		
450		EPC446-DT450-2	879.00		
500		EPC446-DT500-2	879.00		
550		EPC446-DT550-2	879.00		
600		EPC446-DT600-2	879.00		
		600-V. A.C. or 250-V. D.C. — Two Pole			
250		EPC460-DT250-2	902.00		
275		EPC460-DT275-2	902.00		
300		EPC460-DT300-2	902.00		
325		EPC460-DT325-2	902.00		
350	4	EPC460-DT350-2	902.00	EPC460	500.00
400		EPC460-DT400-2	902.00		
450		EPC460-DT450-2	902.00		
500		EPC460-DT500-2	902.00		
550		EPC460-DT550-2	902.00		
600		EPC460-DT600-2	902.00		
		250-V. A.C. or 125-250-V. D.C. — Three Pole			
250		EPC446-DT250-3	977.00		
275		EPC446-DT275-3	977.00		
300		EPC446-DT300-3	977.00		
325		EPC446-DT325-3	977.00		
350	4	EPC446-DT350-3	977.00	EPC446	500.00
400		EPC446-DT400-3	977.00		
450		EPC446-DT450-3	977.00		
500		EPC446-DT500-3	977.00		
550		EPC446-DT550-3	977.00		
600		EPC446-DT600-3	977.00		
		600-V. A.C. — Three Pole			
250		EPC460-DT250-2	1009.00		
275		EPC460-DT275-2	1009.00		
300		EPC460-DT300-2	1009.00		
325		EPC460-DT325-2	1009.00		
350	4	EPC460-DT350-2	1009.00	EPC460	500.00
400		EPC460-DT400-2	1009.00		
450		EPC460-DT450-2	1009.00		
500		EPC460-DT500-2	1009.00		
550		EPC460-DT550-2	1009.00		
600		EPC460-DT600-2	1009.00		

CROUSE-HINDS CONDULETS

TYPE FLB CIRCUIT BREAKER CONDULETS

Square D Air Break Circuit Breakers

Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)

Class I, Group D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IX, V, and III)



These Condulets with air break circuit breakers are suitable for service entrance, feeder or branch circuit protection, for lighting, appliance, and motor circuit conductors.

For manual closing, opening or resetting, an external handle is provided.

Two threaded through-feed hubs are provided. Other sizes or arrangements can be furnished. Prices on application.

50-Ampere Frame Size with Non-Interchangeable Thermal Trip

Amps.	Size Hubs	Condulet With Breaker Cat. No.	List Each	Condulet Without Breaker Cat. No.	List Each
		125-V. A.C. or D.C. — One Pole			
15		FLB171-DT15-1	$ 44.45		
20		FLB171-DT20-1	44.45		
30	¾	FLB171-DT30-1	44.45	FLB171	$35.00
40		FLB171-DT40-1	44.45		
50		FLB171-DT50-1	44.45		
		250-V. A.C. or 125-250-V. D.C. — Two Pole			
15		FLB172-DT15-2	56.60		
20		FLB172-DT20-2	56.60		
30	1	FLB172-DT30-2	56.60	FLB172	35.00
40		FLB172-DT40-2	56.60		
50		FLB172-DT50-2	56.60		
		250-V. A.C. or 125-250-V. D.C. — Three Pole			
15		FLB173-DT15-3	88.05		
20		FLB173-DT20-3	88.05		
30	1¼	FLB173-DT30-3	88.05	FLB173	56.00
40		FLB173-DT40-3	88.05		
50		FLB173-DT50-3	88.05		
		600-V. A.C. — Three Pole			
15		FLB175-DT15-3	125.70		
20		FLB175-DT20-3	125.70		
30	1¼	FLB175-DT30-3	125.70	FLB175	66.00
40		FLB175-DT40-3	125.70		
50		FLB175-DT50-3	125.70		

100-Ampere Frame Size with Non-Interchangeable Thermal Trip and Non-Adjustable Magnetic Trip

		250-V. or 125-250-V. D.C. — Two Pole			
70	1½	FLB174-DT70-2	135.40	FLB174	90.00
100		FLB174-DT100-2	135.40		
		250-V. A.C. — Three Pole			
70	1½	FLB174-DT70-3	149.70	FLB174	90.00
100		FLB174-DT100-3	149.70		
		600-V. A.C. — Three Pole			
70	1½	FLB436-DT70-3	187.35	FLB436	110.00
100		FLB436-DT100-3	187.35		

225-Ampere Frame Size with Interchangeable Thermal-Magnetic Trip

		250-V. A.C. or D.C. — Two Pole			
125		FLB342-DT125-2	359.80		
150		FLB342-DT150-2	359.80		
175	2½	FLB342-DT175-2	359.80	FLB342	220.00
200		FLB342-DT200-2	359.80		
225		FLB342-DT225-2	359.80		
		250-V. A.C. or 125-250-V. D.C. — Three Pole			
125		FLB342-DT125-3	388.20		
150		FLB342-DT150-3	388.20		
175	2½	FLB342-DT175-3	388.20	FLB342	220.00
200		FLB342-DT200-3	388.20		
225		FLB342-DT225-3	388.20		
		600-V. A.C. — Three Pole			
125		FLB346-DT125-3	419.70		
150		FLB346-DT150-3	419.70		
175	2½	FLB346-DT175-3	419.70	FLB346	220.00
200		FLB346-DT200-3	419.70		
225		FLB346-DT225-3	419.70		

CROUSE-HINDS CONDULETS

TYPE DVS CIRCUIT BREAKER CONDULETS

Square D Air Break Circuit Breakers Dust-Tight and Watertight

Class II, Groups E, F, and G; and Class III (NEMA Types IX, V, IV, and III)



These Condulets are suitable for service entrance or branch circuit protection, for lighting, heating, appliance and motor circuits. They provide maximum safety and convenience of installation in Classes II and III hazardous locations, and give complete protection where exposed to corrosive vapors, abrasive dusts, or weather.

Two threaded through-feed hubs are provided. Other sizes or arrangements can be furnished. Prices on application.

50-Ampere Frame Size with Non-Interchangeable Thermal Trip

Amps.	Size Hubs	Condulet With Breaker Cat. No.	List Each	Condulet Without Breaker Cat. No.	List Each
		125-V. A.C. or D.C. — One Pole			
15		DVS121-DT15-1	$36.45		
20		DVS121-DT20-1	36.45		
30	¾	DVS121-DT30-1	36.45	DVS121	$27.00
40		DVS121-DT40-1	36.45		
50		DVS121-DT50-1	36.45		
		250-V. A.C. or 125-250-V. D.C. — Two Pole			
15		DVS122-DT15-2	57.60		
20		DVS122-DT20-2	57.60		
30	1	DVS122-DT30-2	57.60	DVS122	36.00
40		DVS122-DT40-2	57.60		
50		DVS122-DT50-2	57.60		
		250-V. A.C. or 125-250-V. D.C. — Three Pole			
15		DVS123-DT15-3	68.05		
20		DVS123-DT20-3	68.05		
30	1¼	DVS123-DT30-3	68.05	DVS123	36.00
40		DVS123-DT40-3	68.05		
50		DVS123-DT50-3	68.05		
		600-V. A.C. or 250-V. D.C. — Two Pole			
15		DVS936-DT15-2	97.60		
20		DVS936-DT20-2	97.60		
30	1¼	DVS936-DT30-2	97.60	DVS936	50.00
40		DVS936-DT40-2	97.60		
50		DVS936-DT50-2	97.60		
		600-V. A.C.—Three Pole			
15		DVS936-DT15-3	109.70		
20		DVS936-DT20-3	109.70		
30	1¼	DVS936-DT30-3	109.70	DVS936	50.00
40		DVS936-DT40-3	109.70		
50		DVS936-DT50-3	109.70		

100-Ampere Frame Size with Non-Interchangeable Thermal Trip and Non-Adjustable Magnetic Trip

		250-V. A.C. or 125-250-V. D.C. — Two Pole			
70	1½	DVS94-DT70-2	105.40	DVS94	60.00
100		DVS94-DT100-2	105.40		
		250-V. A.C. — Three Pole			
70	1½	DVS94-DT70-3	119.70	DVS94	60.00
100		DVS94-DT100-3	119.70		
		600-V. A.C. or 250-V. D.C. — Two Pole			
70	1½	DVS946-DT70-2	142.90	DVS946	80.00
100		DVS946-DT100-2	142.90		
		600-V. A.C. — Three Pole			
70	1½	DVS946-DT70-3	157.35	DVS946	80.00
100		DVS946-DT100-3	157.35		

CROUSE-HINDS CONDULETS

TYPE DVS CIRCUIT BREAKER CONDULETS

Square D Air Break Circuit Breakers Dust-Tight and Watertight

Class II, Groups E, F, and G; and Class III (NEMA Types IX, V, IV, and III)

225-Ampere Frame Size with Interchangeable Thermal-Magnetic Trip

Amps.	Size Hubs	Condulet With Breaker Cat. No.	List Each	Condulet Without Breaker Cat. No.	List Each
		250-V. A.C. or 125-250-V. D.C. — Two Pole			
125		DVS97-DT125-2	$309.80		
150		DVS97-DT150-2	309.80		
175	2½	DVS97-DT175-2	309.80	DVS97	$170.00
200		DVS97-DT200-2	309.80		
225		DVS97-DT225-2	309.80		
		600-V. A.C. or 250-V. D.C. — Two Pole			
125		DVS976-DT125-2	334.30		
150		DVS976-DT150-2	334.30		
175	2½	DVS976-DT175-2	334.30	DVS976	170.00
200		DVS976-DT200-2	334.30		
225		DVS976-DT225-2	334.30		
		250-V. A.C. or 125-250-V. D.C. — Three Pole			
125		DVS97-DT125-3	338.20		
150		DVS97-DT150-3	338.20		
175	2½	DVS97-DT175-3	338.20	DVS97	170.00
200		DVS97-DT200-3	338.20		
225		DVS97-DT225-3	338.20		
		600-V. A.C. — Three Pole			
125		DVS976-DT125-3	369.70		
150		DVS976-DT150-3	369.70		
175	2½	DVS976-DT175-3	369.70	DVS976	170.00
200		DVS976-DT200-3	369.70		
225		DVS976-DT225-3	369.70		

600-Ampere Frame Size with Interchangeable Thermal-Magnetic Trip

		250-V. A.C. or 125-250-V. D.C. — Two Pole			
250		DVS63-DT250-2	816.60		
275		DVS63-DT275-2	816.60		
300		DVS63-DT300-2	816.60		
325		DVS63-DT325-2	816.60		
350	4	DVS63-DT350-2	816.60	DVS63	460.00
400		DVS63-DT400-2	816.60		
450		DVS63-DT450-2	816.60		
500		DVS63-DT500-2	816.60		
550		DVS63-DT550-2	816.60		
600		DVS63-DT600-2	816.60		
		600-V. A.C. or 250-V. D.C. — Two Pole			
250		DVS636-DT250-2	839.60		
275		DVS636-DT275-2	839.60		
300		DVS636-DT300-2	839.60		
325		DVS636-DT325-2	839.60		
350	4	DVS636-DT350-2	839.60	DVS636	460.00
400		DVS636-DT400-2	839.60		
450		DVS636-DT450-2	839.60		
500		DVS636-DT500-2	839.60		
550		DVS636-DT550-2	839.60		
600		DVS636-DT600-2	839.60		
		250-V. A.C. or 125-250-V. D.C. — Three Pole			
250		DVS63-DT250-3	903.40		
275		DVS63-DT275-3	903.40		
300		DVS63-DT300-3	903.40		
325		DVS63-DT325-3	903.40		
350	4	DVS63-DT350-3	903.40	DVS63	460.00
400		DVS63-DT400-3	903.40		
450		DVS63-DT450-3	903.40		
500		DVS63-DT500-3	903.40		
550		DVS63-DT550-3	903.40		
600		DVS63-DT600-3	903.40		
		600-V. A.C. — Three Pole			
250		DVS636-DT250-3	935.40		
275		DVS636-DT275-3	935.40		
300		DVS636-DT300-3	935.40		
325		DVS636-DT325-3	935.40		
350	4	DVS636-DT350-3	935.40	DVS636	460.00
400		DVS636-DT400-3	935.40		
450		DVS636-DT450-3	935.40		
500		DVS636-DT500-3	935.40		
550		DVS636-DT550-3	935.40		
600		DVS636-DT600-3	935.40		

CROUSE-HINDS CONDULETS
TYPE WMKS ENCLOSED SAFETY SWITCH CONDULET
With Interlocking Plug Receptacle



Weather Resistant (Raintight) NEMA Types III and V Take Type DP Plugs

Furnished with fusible motor circuit switch and receptacle with spring door housing. The receptacle is so interlocked with the switch that the plug cannot be withdrawn unless the switch is open; and the switch cannot be closed unless the plug is fully inserted.

230 Volts A.C., 250 Volts D.C.

Amps.	Hub Size †	H.P. Rating 230-V. A.C.	H.P. Rating 250-V. D.C.	Cat. No.	List Each
		2-Pole Fusible Switch with 2-Wire, 2-Pole, Style 1 Receptacle**			
30	¾	2	5	WMKS1632	$89.70
60	1¼	5	10	WMKS1662	102.50
100	1½	10	15	WMKS16102	216.00
200	2	15	30	WMKS16202	317.00
		2-Pole Fusible Switch with 2-Wire, 3-Pole, Style 2 Receptacle**			
30	¾	2	5	WMKS16323	$91.50
60	1¼	5	10	WMKS16623	104.50
100	1½	10	15	WMKS161023	218.00
200	2	15	30	WMKS162023	326.00
		3-Pole Fusible Switch with 3-Wire, 3-Pole, Style 1 Receptacle**			
30	1	3	....	WMKS1633	$98.80
60	1¼	7½	....	WMKS1663	115.50
100	1½	15	....	WMKS16103	236.00
200	2½	30	....	WMKS16203	344.00
		3-Pole Fusible Switch with 3-Wire, 4-Pole, Style 2 Receptacle**			
30	1	3	....	WMKS16334	$102.50
60	1¼	7½	....	WMKS16634	119.00
100	1½	15	....	WMKS161034	240.00

575 Volts A.C., 600 Volts D.C.

Amps.	Hub Size †	H.P. Rating 575-V. A.C.††	H.P. Rating 600-V. D.C.	Cat. No.	List Each
		2-Pole Fusible Switch with 2-Wire, 3-Pole, Style 2 Receptacle**			
30	¾	5	7½	WMKS163235	$106.20
60	1¼	10	15	WMKS166235	121.00
100	1½	15	25	WMKS1610235	231.00
200	2	30	50	WMKS1620235	337.00
		3-Pole Fusible Switch with 3-Wire, 3-Pole, Style 1 Receptacle**			
30	1	7½	....	WMKS16335	$113.50
60	1¼	20	....	WMKS16635	128.00
100	1½	30	....	WMKS161035	245.00
200	2½	50	....	WMKS162035	350.00
		3-Pole Fusible Switch with 3-Wire, 4-Pole, Style 2 Receptacle**			
30	1	7½	....	WMKS163345	$117.20
60	1¼	20	....	WMKS166345	133.50
100	1½	30	....	WMKS1610345	249.00

†Furnished with one drilled and tapped conduit opening at the top equipped with threaded-in bushing. Removal of the bushing permits the use of the opening for the next larger size conduit. Other sizes or arrangements of conduit openings can be furnished. Prices on application.

**Style 1—Grounded through shell. Style 2—Grounded through extra pole and shell.

††575-volt A.C. horsepower rating also applies for 440-480-volt A.C. service.

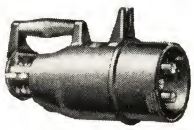
CROUSE-HINDS CONDULETS
TYPE DP INTERLOCKING PLUGS

For Use with Type WMKS Safety Switch and Interlocking Receptacle Condulets

Furnished with Clamp for Cord, Cable, Flexible Conduit, or Armored Conductor



Type DP Plug 30 to 100-Ampere



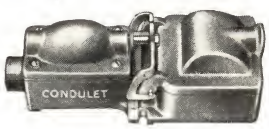
Type DP Plug 200-Ampere

Rating Max. Amps.	Volts	Style 1* Outside Dia. of Cable, Flexible Conduit or Armored Cable	2-Wire, 2-Pole Cat. No.	2-Wire, 2-Pole List Each	3-Wire, 3-Pole Cat. No.	3-Wire, 3-Pole List Each
			DP-		DP-	
30	250	.500- .875	132	$13.00	133	$14.00
		.750-1.188	332	13.00	333	14.00
30 and 60	600†	.750-1.188	162	15.00	163	16.00
		1.188-1.400	362	15.00	363	16.00
100	600†	.938-1.469	1102	28.00	1103	30.00
		1.469-1.800	3102	28.00	3103	30.00
200	600†	1.188-1.813	1202	80.00	1203	86.00
		1.750-2.563	3202	80.00	3203	86.00

Rating Max. Amps.	Volts	Style 2* Outside Dia. of Cable, Flexible Conduit or Armored Cable	2-Wire, 3-Pole Cat. No.	2-Wire, 3-Pole List Each	3-Wire, 4-Pole Cat. No.	3-Wire, 4-Pole List Each
			Use 600-Volt plugs listed directly below			
			DP-		DP-	
30	250	.500- .875				
		.750-1.188				
30 and 60	600†	.750-1.188	1623	18.50	.....	.....
		1.188-1.400	3623	18.50	.....	.....
		.500- .875	.....	.....	164	23.00
		.875-1.400	.....	.....	364	23.00
100	600†	.938-1.469	11023	33.00	.....	.....
		1.469-1.800	31023	33.00	.....	.....
		1.000-1.500	.....	.....	1104	37.00
		1.500-1.800	.....	.....	3104	37.00
200	600†	1.188-1.813	12023	96.00	.....	.....
		1.750-2.563	32023	96.00	.....	.....

TYPE FSQ SAFETY SWITCH AND INTERLOCKING RECEPTACLE CONDULET

Type FSQ Condulet is furnished with Tumbler Switch, Vaportight Cover, Hubbell 3-Pole Twist Lock Receptacle, and Hubbell 3-Pole Twist Lock Plug



Size	Cat. No.	List Each
¾	FSQ28	$24.00

*Style 1—Grounded through shell. Style 2—Grounded through extra pole and shell.

†Use with 250-volt receptacles.

CROUSE-HINDS CONDULETS
EFS AND EFD SERIES TUMBLER SWITCH CONDULETS
Explosion-Proof and Dust-Tight

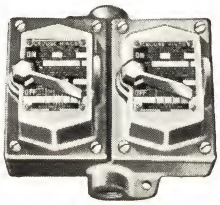
Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IX, V)

Used to enclose tumbler and push button switches, motor control push button stations, pilot lights, manual motor starters, and circuit breakers.

Furnished With Tumbler Switches



Type EFS Single-Gang



Type EFSC Two-Gang

Style	Amperes 125-V.	Amperes 250-V.	Max. H.P.	Size Hub	Cat. No.	List Each
Dead End—Single-Gang						
1-Pole	20T	10	..		EFS1129	$10.90
2-Pole	20T	20	2		EFS118	11.10
3-Way	15T	10	..	½	EFS1130	11.70
4-Way	10T	5	..		EFS1140	15.50
1-Pole	20T	10	..		EFS2129	11.00
2-Pole	20T	20	2		EFS218	11.20
3-Pole	10	5	½ A.C.	¾	EFS2123	13.60
3-Way	15T	10	..		EFS2130	11.80
4-Way	10T	5	..		EFS2140	15.60
Through Feed—Single-Gang						
1-Pole	20T	10	..		EFSC1129	$11.10
2-Pole	20T	20	2		EFSC118	11.30
3-Way	15T	10	..	½	EFSC1130	11.90
4-Way	10T	5	..		EFSC1140	15.70
1-Pole	20T	10	..		EFSC2129	11.30
2-Pole	20T	20	2		EFSC218	11.50
3-Pole	10	5	½ A.C.	¾	EFSC2123	13.90
3-Way	15T	10	..		EFSC2130	12.10
4-Way	10T	5	..		EFSC2140	15.90
Dead End—Two-Gang†						
1-Pole	20T	10	..	½	EFS1229	$21.80
1-Pole	20T	10	..		EFS2229	21.90
3-Way	15T	10	..	¾	EFS2230	23.50
1-Pole	20T	10	..		EFS3229	22.10
1-Pole	30T	30	..	1	EFD3691	27.20
2-Pole	20T	20	2		EFS328	22.50
3-Way	15T	10	..		EFS3230	23.70
3-Way	30T	30	..	1	EFD3694	32.20
4-Way	10T	5	..		EFS3240	31.30
4-Way	20T	10	..		EFD3690	40.20
Through Feed—Two Gang†						
1-Pole	20T	10	..		EFSC1229	$22.00
2-Pole	20T	20	2	½	EFSC128	22.40
3-Way	15T	10	..		EFSC1230	23.60
4-Way	10T	5	..		EFSC1240	31.20
1-Pole	20T	10	..		EFSC2229	22.20
2-Pole	20T	20	2		EFSC228	22.60
3-Pole	10	5	½ A.C.	¾	EFSC2223	27.40
3-Way	15T	10	..		EFSC2230	23.80
4-Way	10T	5	..		EFSC2240	31.40
1-Pole	20T	10	..		EFSC3229	22.60
1-Pole	30T	30	..		EFDC3691	27.70
2-Pole	20T	20	2		EFSC328	23.00
2-Pole	30T	30‡	2		EFDC3693	31.20
3-Pole	10	5	½ A.C.	1	EFSC3223	27.80
3-Way	15T	10	..		EFSC3230	24.20
3-Way	30T	30	..		EFDC3694	32.70
4-Way	10T	5	..		EFSC3240	31.80
4-Way	20T	10	..		EFDC3690	40.70

†Combinations of switches can be furnished. Prices on application.

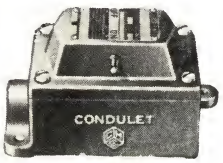
‡Also rated at 20 amperes, 600 volts.

CROUSE-HINDS CONDULETS
EFS SERIES TUMBLER SWITCH CONDULETS
Explosion-Proof and Dust-Tight

Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IX, V)

Used to enclose tumbler and push button switches, motor control push button stations, pilot lights, manual motor starters, and circuit breakers.

Furnished With Tumbler Switches



Type EFS For Surface Mounting Single



Type EFSC For Surface Mounting Triple

For Surface Mounting—Plain Finish*

Style	Amperes 125-V.	Amperes 250-V.	Size Hub	Cat. No.	List Each
Type EFS—Single					
1-Pole	10T	5		EFS1101	$10.90
2-Pole	10T	10	½	EFS1100	11.10
3-Way	10T	5		EFS1107	11.50
4-Way	5T	2		EFS1108	14.50
1-Pole	10T	5		EFS2101	11.00
2-Pole	10T	10	¾	EFS2100	11.20
3-Way	10T	5		EFS2107	11.60
4-Way	5T	2		EFS2108	14.60
Type EFSC—Single					
1-Pole	10T	5		EFSC1101	$11.10
2-Pole	10T	10		EFSC1100	11.30
3-Way	10T	5	½	EFSC1107	11.70
4-Way	5T	2		EFSC1108	14.70
1-Pole	10T	5		EFSC2101	11.30
2-Pole	10T	10	¾	EFSC2100	11.50
3-Way	10T	5		EFSC2107	11.90
4-Way	5T	2		EFSC2108	14.90
Type EFS—Duplex†					
1-Pole	10T	5	½	EFS1109	$13.90
1-Pole	10T	5		EFS2109	14.00
2-Pole	10T	10	¾	EFS2110	14.40
3-Way	10T	5		EFS2113	15.20
4-Way	5T	2	1	EFS3114	21.40
Type EFSC—Duplex†					
1-Pole	10T	5		EFSC1109	$14.10
2-Pole	10T	10	½	EFSC1110	14.50
3-Way	10T	5		EFSC1113	15.30
4-Way	5T	2		EFSC1114	21.30
1-Pole	10T	5		EFSC2109	14.30
2-Pole	10T	10	¾	EFSC2110	14.70
3-Way	10T	5		EFSC2113	15.50
4-Way	5T	2		EFSC2114	21.50
Type EFS—Triple†					
1-Pole	10T	5	½	EFS1115	$16.90
1-Pole	10T	5	¾	EFS2115	17.00
2 Pole	10T	10		EFS3116	17.80
3-Way	10T	5	1	EFS3117	19.00
Type EFSC—Triple†					
1-Pole	10T	5		EFSC1115	$17.10
2-Pole	10T	10	½	EFSC1116	17.70
1-Pole	10T	5		EFSC2115	17.30
2-Pole	10T	10	¾	EFSC2116	17.90
3-Way	10T	5		EFSC2117	19.10
4-Way	5T	2		EFSC2118	28.10

*Plain flush covers are available and can be specified by addition of suffix S173 to catalog number of surface mounting plain cover type at an additional charge of **$0.50** list, each. †Combinations of switches can be furnished. Prices on application.

CROUSE-HINDS CONDULETS

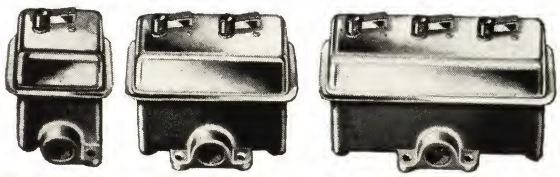
TYPE ESW TUMBLER SWITCH CONDULETS

Explosion-Proof and Dust-Tight

Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IX and V)

Non-Adjustable—Factory Sealed

Switch Unit Includes Tumbler Switch with Sealed Housing and Cover



Single-Gang Two-Gang† Three-Gang†

Style	Amperes 125 V.	Amperes 250 V.	Cat. No.	List Each
Single-Gang				
¾" Through-Feed Hubs—Horizontal or Vertical				
For Flush Mounting—Chromium Plated Cover				
1-Pole	10T	5	ESW2113	$21.40
2-Pole	10T	10	ESW2123	21.60
3-Way	10T	5	ESW2133	22.20
4-Way	5T	2	ESW2143	26.90
1-Pole, M.O.‡	10	5	ESW2153	24.20
1-Pole, M.C.‡	10	5	ESW2163	24.20
For Surface Mounting—Plain Finish Cover				
1-Pole	10T	5	ESW2112	$18.90
2-Pole	10T	10	ESW2122	19.10
3-Way	10T	5	ESW2132	19.70
4-Way	5T	2	ESW2142	24.40
1-Pole, M.O.‡	10	5	ESW2152	21.70
1-Pole, M.C.‡	10	5	ESW2162	21.70
Two-Gang†				
Two ¾" Hubs at Top and One ¾" Hub at Bottom—Reversible				
For Flush Mounting—Chromium Plated Cover				
1-Pole	10T	5	ESW2213	$30.90
2-Pole	10T	10	ESW2223	31.10
3-Way	10T	5	ESW2233	32.50
4-Way	5T	2	ESW2243	41.90
1-Pole, M.O.‡	10	5	ESW2253	36.50
1-Pole, M.C.‡	10	5	ESW2263	36.50
For Surface Mounting—Plain Finish Cover				
1-Pole	10T	5	ESW2212	$26.90
2-Pole	10T	10	ESW2222	27.30
3-Way	10T	5	ESW2232	28.50
4-Way	5T	2	ESW2242	37.90
1-Pole, M.O.‡	10	5	ESW2252	32.50
1-Pole, M.C.‡	10	5	ESW2262	32.50
Three-Gang†				
Two ¾" and One 1" Hubs at Top, and One 1" at Bottom—Reversible				
For Flush Mounting—Chromium Plated Cover				
1-Pole	10T	5	ESW3313	$43.40
2-Pole	10T	10	ESW3323	44.00
3-Way	10T	5	ESW3333	45.80
4-Way	5T	2	ESW3343	59.90
1-Pole, M.O.‡	10	5	ESW3353	51.80
1-Pole, M.C.‡	10	5	ESW3363	51.80
For Surface Mounting—Plain Finish Cover				
1-Pole	10T	5	ESW3312	$38.40
2-Pole	10T	10	ESW3322	39.00
3-Way	10T	5	ESW3332	40.80
4-Way	5T	2	ESW3342	54.90
1-Pole, M.O.‡	10	5	ESW3352	46.80
1-Pole, M.C.‡	10	5	ESW3362	46.80

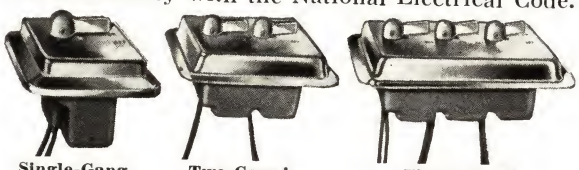
†Combinations of switches can be furnished. Prices on application. ‡Momentary contact: M.O.—normally open; M.C.—normally closed.

CROUSE-HINDS CONDULETS

TYPE ERS REPLACEMENT SWITCH UNITS

For Replacement of Non-Explosion-Proof Flush Mounted Switches in Hazardous Locations Includes Tumbler Switch with Sealed Housing and Cover

In existing buildings it is frequently impractical to remove, in their entirety, non-explosion-proof switch outlets and replace them with full explosion-proof types. In such instances, a considerable degree of safety can be had by enclosing switches in explosion-proof chambers. Type ERS replacement units provide such explosion-proof chambers, but will not bring an electrical installation into full conformity with the National Electrical Code.



Single-Gang Two-Gang† Three-Gang†

Style	Amperes 125 V.	Amperes 250 V.	Cat. No.	List Each
Single-Gang—Chromium Plated Cover				
1-Pole	10T	5	ERS41	$18.00
2-Pole	10T	10	ERS42	18.20
3-Way	10T	5	ERS43	18.80
4-Way	5T	2	ERS44	23.50
1-Pole, M.O.‡	10	5	ERS45	20.80
1-Pole, M.C.‡	10	5	ERS46	20.80
Two-Gang—Chromium Plated Cover				
1-Pole	10T	5	ERS412	$26.50
2-Pole	10T	10	ERS422	26.90
3-Way	10T	5	ERS432	28.10
4-Way	5T	2	ERS442	37.50
1-Pole, M.O.‡	10	5	ERS452	32.10
1-Pole, M.C.‡	10	5	ERS462	32.10
Three-Gang—Chromium Plated Cover				
1-Pole	10T	5	ERS413	$36.00
2-Pole	10T	10	ERS423	36.60
3-Way	10T	5	ERS433	38.40
1-Pole, M.O.‡	10	5	ERS453	44.40
1-Pole, M.C.‡	10	5	ERS463	44.40

TYPE GUSC CONDULETS

Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)

Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IX, V, and III)



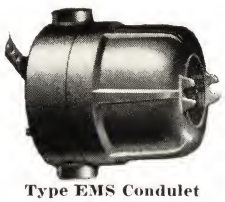
Type GUSC switch Condulets have a rectangular body with a round, threaded opening in the front equipped with a threaded cover. They are furnished with through feed hubs for threaded conduit, and external mounting lugs with fastening holes, and tumbler switches.

	Rating	Size Hub	Cat. No. GUSC-	List Each
1-Pole	30-Amp., 250-V.	½	1061-AH	$15.00
		¾	2061-AH	15.30
2-Pole	30-Amp., 250-V.; 2 HP, 115-230-V. AC; 1 HP, 460-V. AC	½	1052-AH	15.90
		¾	2052-AH	16.20
3-Pole	30-Amp., 250-V.; 20-Amp., 600-V. AC; 2 HP, 115-575-V. AC	¾	2013-AH	21.90
4-Pole	30-Amp., 250-V.; 20-Amp., 600-V. AC; 2 HP, 230-575-V. AC	¾	2024-AH	23.80
3-Way	30-Amp., 250-V.; 2 HP, 220-V. AC; 1 HP, 440-V AC	¾	2073-AH	26.30

†Combinations of switches can be furnished. Prices on application. ‡Momentary contact: M.O.—normally open; M.C.—normally closed.

CROUSE-HINDS CONDULETS

TYPE EMS MERCURY LIMIT SWITCH CONDULET PARTS



Type EMS Condulet



Connection Block



Glass Tube Switch



Switch Carrier

Condulet Housing With Operating Mechanism Only

Size 1 Cat. No.	Size 1 List Each	Size 2 Cat. No.	Size 2 List Each
Direct Action			
EMS33-M2	**$20.00**	**EMS34-M2**	**$21.60**
Snap Action			
EMS330-M2	**25.00**	**EMS340-M2**	**26.60**
Spring Return Clockwise (Facing Cover)			
EMS332	**23.20**	**EMS342**	**24.80**
Spring Return Counter-Clockwise (Facing Cover)			
EMS335	**23.20**	**EMS345**	**24.80**
Spring Return to Center of Travel			
EMS333	**23.20**	.....	.....

Connection Block

No. of Terminals		Cat. No.	List Each
3 for #14-#10 Wire	Molded Bakelite	**CB641**	**$1.40**

Mercury Switches — Ratings Amps. (Non-Inductive) Nom. Size of Switch Amps.††	115 V. A.C. or D.C.	230 V. A.C. or D.C.	440 V. A.C.	Max. H.P. 125-V. or 250 V.-§	Cat. No.	List Each	Switch Carriers Cat. No.	Switch Carriers List Each
Glass Tube Switches								
4	4	2	1	⅓	**241**	**$3.20**	**EMS-4-M2***	**$2.40**
10	10	5	3	1	**210**	**5.70**	**10-M2**	**2.40**
25	25	12½	6	2	**225**	**11.50**	**25**	**3.70**
4	4	2	1	⅓	**242†**	**6.00**	**4-M2***	**2.40**
Metal Clad Switches††								
10	10‡	8‡	5‡	⅓	**110**	**$3.20**	**5-M2***	**$2.40**
20	20‡	16‡	10‡	¾	**120**	**4.30**	**5-M2***	**2.40**

*With vernier adjustment. †Double-throw. All other switches are single-throw. ‡D.C. ampere rating approximately 50% less on these metal clad switches. ††35-ampere metal clad switches can be furnished. Prices on application. §Repulsion induction motors.

CROUSE-HINDS CONDULETS

TYPE FLS GENERAL USE SWITCH CONDULETS

Explosion-Proof, Dust-Tight and Weather Resistant (Raintight)

Class I, Group D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IX, V, and III)

Furnished with No Fuse Switch



Type FLS Condulets with single throw and double throw fuseless switches with no "off" position, rated in amperes, are general use enclosed tumbler switches for hazardous locations.

Double throw and motor reversing fuseless switches with "off" position, rated in horsepower, are for use as motor circuit switches in hazardous locations.

General use switches are quick-make and quick-break. Motor circuit switches are slow-make and quick-break. The slow-make permits proper control of the handle for jogging service.

Single Throw—Tumbler

Size Hubs	2-Pole Cat. No.	2-Pole List Each	3-Pole Cat. No.	3-Pole List Each
	30 Amperes, 250 Volts 5 Amperes, 600 Volts		30 Amperes, 250 Volts 20 Amperes, 600 Volts, A.C. 5 Amperes, 600 Volts, D.C.	
½	**FLS102-11**	**$44.00**	**FLS103-11**	**$60.00**
¾	**FLS102-22**	**44.00**	**FLS103-22**	**60.00**
1	**FLS102-33**	**44.00**	**FLS103-33**	**60.00**
1¼	**FLS102-44**	**44.00**	**FLS103-44**	**60.00**
	Double Throw—Tumbler—No "Off" Position 30 Amperes, 250 Volts—5 Amperes, 600 Volts			
½	**FLS101-11**	**$60.00**	.....	.....
¾	**FLS101-22**	**60.00**	.....	.....
1	**FLS101-33**	**60.00**	.....	.....
1¼	**FLS101-44**	**60.00**	.....	.....
	Double Throw—With "Off" Position*			
½	**FLS112-11**	**$72.00**	**FLS113-11**	**$76.00**
¾	**FLS112-22**	**72.00**	**FLS113-22**	**76.00**
1	**FLS112-33**	**72.00**	**FLS113-33**	**76.00**
	Motor Reversing—With "Off" Position*			
½	**FLS110-11**	**$76.00**	**FLS111-11**	**$80.00**
¾	**FLS110-22**	**76.00**	**FLS111-22**	**80.00**
1	**FLS110-33**	**76.00**	**FLS111-33**	**80.00**

*For ratings of these switches, see table immediately below.

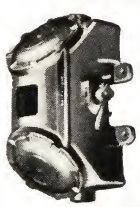
Description	H.P. Ratings at 20 Amperes A.C. 110-V.	208/220-V.	440/600-V.
3-Pole, 2 or 3-Phase....	3	5	7½
2-Pole, 1-Phase	1½	3	5

TYPE FLS MOTOR CIRCUIT SWITCH CONDULETS

Explosion-Proof, Dust-Tight and Weather Resistant (Raintight)

Class I, Group D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IX, V, and III)

Furnished With Switch—Not Fusible



Type FLS Motor Circuit Switches are for motor disconnects to comply with code requirements for installation of a disconnect switch within sight of the motor.

The fuseless switch is the sliding action quick-make quick-break type with double break positive pressure contacts.

Amps.	Poles	H.P. Rating 230-V. A.C.	250-V. D.C.	575-V. A.C.	Size Hubs	Cat. No. FLS-	List Each
30	2	5	5	5	¾	**30254-1-22**	**$126.00**
30	3	7½	....	10	1	**30354-1-33**	**136.50**
60	2	10	10	15	1¼	**60254-1-44**	**136.50**
60	3	20	....	25	1¼	**60354-1-44**	**147.00**
100	2	10	20	15	1½	**10254-1-55**	**360.00**
100	3	30	....	40	1½	**10354-1-55**	**370.00**
200	2	25	30	50	2	**20254-1-66**	**375.00**
200	3	50	....	50	2½	**20354-1-77**	**385.00**

CROUSE-HINDS CONDULETS
TYPE WMK ENCLOSED SAFETY SWITCH CONDULETS
Watertight
NEMA Types III, IV, and V



Type WMK Condulets are furnished with switches and are especially suited to locations where a strong, durable case and switch mechanism are required. May be used indoors or outdoors, and in all places except hazardous locations.

An interlock is provided which prevents the opening of the enclosure except when the switch is in the "off" position. These Condulets are furnished with one drilled and tapped conduit opening at the top and one at the bottom equipped with threaded-in bushings. Removal of the bushing permits the use of the next larger size conduit. Other arrangements or sizes available. Information on request.

230-Volts A.C., 250-Volts D.C.

H.P. Rating 230-V. A.C.	H.P. Rating 250-V. D.C.	Amps.	Hub Size	Cat. No.	List, Each
			2-Pole—No Fuse		
3	5	30	¾	WMK30254-1-22	$ 75.50
7½	10	60	1¼	WMK60254-1-44	80.20
15	15	100	1½	WMK10254-1-55	207.00
25	30	200	2	WMK20254-1-66	287.00
			3-Pole—No Fuse		
5	....	30	1	WMK30354-1-33	$ 83.00
10	....	60	1¼	WMK60354-1-44	88.70
20	....	100	1½	WMK10354-1-55	221.00
40	....	200	2½	WMK20354-1-77	301.00
			2-Pole—Fusible*		
2	5	30	¾	WMK302-1-22	$ 74.50
5	10	60	1¼	WMK602-1-44	78.20
10	15	100	1½	WMK1002-1-55	205.00
15	30	200	2	WMK2002-1-66	301.00
			3-Wire, Solid Neutral (2 Blades, 2 Fuses)*		
3	....	30	1	WMK307-1-33	$ 82.00
7½	....	60	1¼	WMK607-1-44	88.70
15	....	100	1½	WMK1007-1-55	220.00
30	....	200	2½	WMK2007-1-77	317.00
			3-Wire Switched Neutral (3 Blades, 2 Fuses)*		
3	....	30	1	WMK308-1-33	$ 83.00
7½	....	60	1¼	WMK608-1-44	91.50
15	....	100	1½	WMK1008-1-55	225.00
30	....	200	2½	WMK2008-1-77	323.00
			3-Pole—Fusible*		
3	....	30	1	WMK303-1-33	$ 83.00
7½	....	60	1¼	WMK603-1-44	91.50
15	....	100	1½	WMK1003-1-55	225.00
30	....	200	2½	WMK2003-1-77	323.00

575-Volts, A.C.—600-Volts, D.C.

H.P. Rating 575-V. A.C.†	H.P. Rating 600-V. D.C.	Amps.	Hub Size	Cat. No.	List, Each
			2-Pole—No Fuse		
7½	7½	30	¾	WMK30254-1-22	$ 75.50
7½	15	60	1¼	WMK60254-1-44	80.20
25	25	100	1½	WMK10254-1-55	207.00
50	50	200	2	WMK20254-1-66	287.00
			3-Pole—No Fuse		
10	....	30	1	WMK30354-1-33	$ 83.00
25	....	60	1¼	WMK60354-1-44	88.70
40	....	100	1½	WMK10354-1-55	221.00
50	....	200	2½	WMK20354-1-77	301.00
			2-Pole—Fusible*		
5	7½	30	¾	WMK3025-1-22	$ 92.30
10	15	60	1¼	WMK6025-1-44	99.00
15	25	100	1½	WMK10025-1-55	220.00
30	50	200	2	WMK20025-1-66	317.00
			3-Pole—Fusible*		
7½	....	30	1	WMK3035-1-33	$101.00
20	....	60	1¼	WMK6035-1-44	109.50
30	....	100	1½	WMK10035-1-55	237.00
50	....	200	2½	WMK20035-1-77	331.00

†575-volt A.C. horsepower rating also applies for 440-480-volt A.C. service. *Cartridge fuses are not included in the catalog number or list price.

CROUSE-HINDS CONDULETS
Y SERIES CONDULETS
For Cutouts
NEMA Type I

Take main line fuse cutouts. Furnished with sheet steel door and cutout fastening plate.



Type Y



Type YC

Type Y
30 Amperes, 250 Volts

Size	2-Wire Cat. No.	2-Wire List, Each	3-Wire Cat. No.	3-Wire List, Each
½	Y1302	$4.70	.....	.....
¾	Y2302	4.90	Y2303	$5.90

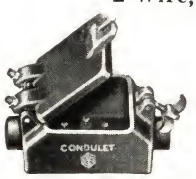
Type YC
30 Amperes, 250 Volts

½	YC1302	$5.00	YC1303	$6.00
¾	YC2302	5.20	YC2303	6.20
1	YC3302	5.40	YC3303	6.40
1¼	YC4302	5.60	YC4303	6.60
	60 Amperes, 250 Volts			
¾	YC2602	$7.60	YC2603	$8.40
1	YC3602	7.80	.....	.....
1¼	.....	.....	YC4603	8.80

TYPE YAC CONDULETS
Watertight
NEMA Types III, IV, and V

Take main line fuse cutouts. Cast Feraloy door.

2-Wire, 30 Amperes, 250 Volts



Size	Cat. No.	List, Each
¾	YAC2302	$8.20

TYPE YYC CONDULETS WITH HUB PLATES
For Cutouts
NEMA Type I

Take main line fuse cutouts. Furnished with cast Feraloy door, removable conduit hub plates, and cutout fastening plate.

30 Amperes, 250 Volts

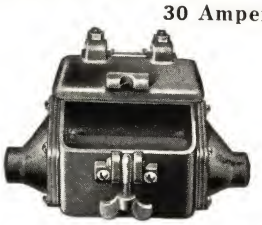


Size	2-Wire Cat. No.	2-Wire List, Each
½	YYC1302	$ 8.60
¾	YYC2302	9.00
	3-Wire	
¾	YYC2303	10.80
1	YYC3303	11.20

TYPE YWC WITH HUB PLATES
Watertight—For Cutouts
NEMA Types III, IV, and V

Take main line fuse cutouts. Furnished with cast Feraloy door, removable conduit hub plates, gaskets and cutout fastening plate.

30 Amperes, 250 Volts



Size	2-Wire Cat. No.	2-Wire List, Each
½	YWC1302	$10.60
¾	YWC2302	11.00
	3-Wire	
¾	YWC2303	13.10
1	YWC3303	13.50

CROUSE-HINDS CONDULETS

EFS SERIES PUSH BUTTON STATION CONDULETS

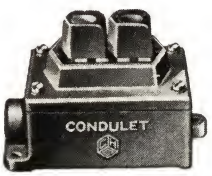
Explosion-Proof and Dust-Tight

Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, and V)

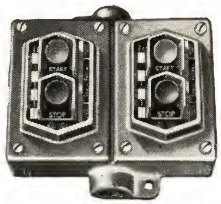
EFS series push button station Condulets with front operated push buttons are furnished with individual indicating plates, one under each button. The standard markings available are as follows:

START	RUN	TEST	FORWARD	UP	RAISE
STOP	JOG	HAND	REVERSE	DOWN	LOWER
ON	RESET	AUTO	OPEN	IN	LGT. ON
OFF	TRIP	EMER.	CLOSE	OUT	

Furnished with Motor Control Push Button Stations—Front Operated



EFS—Single-Gang



EFSC—Two-Gang†

Push Button Station Information‡

600 Volts A.C. Maximum With Push Button Station

Normal Positions	Plate Marking	Size Hub	Cat. No. EFS-	List, Each EFS-	Cat. No. EFSC-	List, Each EFSC-	Form ★
Single-Gang—D120 Series Standard Duty							
1 Circuit Open—A	Start	½	111	$14.30	111	$14.50	
		¾	211	14.40	211	14.70	1
1 Circuit Closed—A	Stop	½	1102	14.30	1102	14.50	
		¾	212	14.40	212	14.70	2
2 Circuits 1 Open—A 1 Closed—B	Start	½	115	16.80	115	17.00	
	Stop	¾	215	16.90	215	17.20	5
2 Circuits Open—A-B	Start	½	1103	16.80	1103	17.00	
	Start	¾	213	16.90	2103	17.20	3
2 Circuits Closed—A-B	Stop	½	1105	16.80	1105	17.00	
	Stop	¾	2105	16.90	2105	17.20	05
1 Circuit Universal	Must be Specified*	½	1184	15.10	1184	15.30	
		¾	2184	15.20	2184	15.50	184
2 Circuits Universal	Must be Specified*	½	.....	.....	1190	18.50	
		¾	2190	18.40	2190	18.70	190
Two-Gang—D120 Series Standard Duty							
1 Circuit Open—A	Start	½	121	$28.60	121	$28.80	
		¾	221	28.70	221	29.00	1
1 Circuit Closed—A	Stop	½	122	28.60	122	28.80	
		¾	2202	28.70	2202	29.00	2
2 Circuits 1 Open—A 1 Closed—B	Start	½	.....	.....	125	33.80	
	Stop	¾	225	33.70	225	34.00	5
2 Circuits Open—A-B	Start	½	.....	.....	123	33.80	
	Start	¾	2203	33.70	2203	34.00	3
2 Circuits Closed—A-B	Stop	½	.....	.....	1205	33.80	
	Stop	¾	2205	33.70	2205	34.00	05
1 Circuit Universal	Must be Specified*	½	.....	.....	1284	31.40	
		¾	2284	31.30	2284	31.60	184
2 Circuits Universal	Must be Specified*	½	.....	.....	1290	36.80	
		¾	2290	36.70	2290	37.00	190

★Order by catalog number. Use type and form number for identification of Condulets for hazardous locations when consulting Underwriters' Laboratories, Inc., List of Inspected Electrical Equipment. ‡Two-circuit push button stations are provided with a removable jumper for common line connection. It can be quickly removed for independent connections. *Indicating plate markings must be specified. †Combinations of push button stations can be furnished. Prices on application.

CROUSE-HINDS CONDULETS

EFS SERIES PUSH BUTTON STATION CONDULETS

Explosion-Proof and Dust-Tight

Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, and V)

The indicating plate marking for each of the units must be specified. Two styles of indicating plates are available; one for a single marking and one for two markings. Either one or two markings, selected from the list below, will be supplied at no additional charge. Markings other than those shown will be supplied at **$1.00** per word list additional.

START	RUN	TEST	FORWARD	UP	RAISE
STOP	JOG	HAND	REVERSE	DOWN	LOWER
ON	RESET	AUTO	OPEN	IN	LGT. ON
OFF	TRIP	EMER.	CLOSE	OUT	

Furnished with Motor Control Push Button Stations—Front Operated

Single Button Operates Both Buttons of the Push Button Station Simultaneously



Type EFS



Type EFSC

Push Button Station Information‡

600 Volts A.C. Maximum With Push Button Station

Normal Positions	Size Hub	Cat. No.	List, Each	Form ★
Type EFS Single-Gang—D120 Series Standard Duty				
2 Circuits 1 Open—A 1 Closed—B	½	EFS1155	$16.80	
	¾	EFS2155	16.90	55
	1	EFS3155	17.10	
2 Circuits Open—A-B	½	EFS1155B	16.80	
	¾	EFS2155B	16.90	55B
	1	EFS3155B	17.10	
2 Circuits Closed—A-B	½	EFS1155D	16.80	
	¾	EFS2155D	16.90	55D
	1	EFS3155D	17.10	
2 Circuits Universal	¾	EFS2192	18.40	
	1	EFS3192	18.60	192
Type EFSC Single-Gang—D120 Series Standard Duty				
2 Circuits 1 Open—A 1 Closed—B	½	EFSC1155	$17.00	
	¾	EFSC2155	17.20	55
	1	EFSC3155	17.60	
2 Circuits Open—A-B	½	EFSC1155B	17.00	
	¾	EFSC2155B	17.20	55B
	1	EFSC3155B	17.60	
2 Circuits Closed—A-B	½	EFSC1155D	17.00	
	¾	EFSC2155D	17.20	55D
	1	EFSC3155D	17.60	
2 Circuits Universal	½	EFSC1192	18.50	
	¾	EFSC2192	18.70	192
	1	EFSC3192	19.10	

★Order by catalog number. Use type and form number for identification of Condulets for hazardous locations when consulting Underwriters' Laboratories, Inc., List of Inspected Electrical Equipment.

‡Two-circuit push button stations are provided with a removable jumper for common line connection. It can be quickly removed for independent connections.

CROUSE-HINDS CONDULETS

EFS SERIES PUSH BUTTON STATION CONDULETS

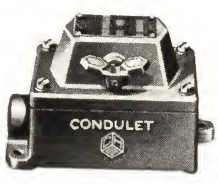
Explosion-Proof and Dust-Tight

Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, and V)

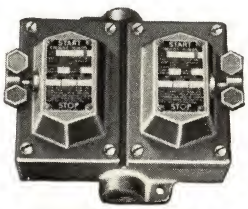
EFS series push button station Condulets with rocker type operating handle are furnished with individual indicating plates. The standard markings available are as follows:

START	RUN	TEST	FORWARD	UP	RAISE
STOP	JOG	HAND	REVERSE	DOWN	LOWER
ON	RESET	AUTO	OPEN	IN	LGT. ON
OFF	TRIP	EMER.	CLOSE	OUT	

Furnished with Motor Control Push Button Stations—Rocker Type Operating Handle



EFS—Single-Gang



EFSC—Two-Gang†

Push Button Switch Information‡

600 Volts A.C. Maximum With Push Button Station

Normal Positions	Plate Marking	Size Hub	Cat. No.	List, Each	Cat. No.	List, Each	Form ★
Single-Gang—D120 Series Standard Duty			**EFS-**		**EFSC-**		
1 Circuit Open—A	Start	½	1174	$14.30	1174	$14.50	
		¾	2174	14.40	2174	14.70	74
1 Circuit Closed—A	Stop	½	1177	14.30	1177	14.50	
		¾	2177	14.40	2177	14.70	77
2 Circuits 1 Open—A 1 Closed—B	Start	½	1162	16.80	1162	17.00	
	Stop	¾	2162	16.90	2162	17.20	62
2 Circuits Open—A-B	Start	½	1165	16.80	1165	17.00	
	Start	¾	2165	16.90	2165	17.20	65
2 Circuits Closed—A-B	Stop	½	1168	16.80	1168	17.00	
	Stop	¾	2168	16.90	2168	17.20	68
1 Circuit Universal	Must be Specified*	½	1596	15.10	1596	15.30	
		¾	2596	15.20	2596	15.50	596
2 Circuits Universal	Must be Specified*	½	.....	.....	1194	18.50	
		¾	2194	18.40	2194	18.70	194
Two-Gang—D120 Series Standard Duty			**EFS-**		**EFSC-**		
1 Circuit Open—A	Start	½	1274	$28.60	1274	$28.80	
		¾	2274	28.70	2274	29.00	74
1 Circuit Closed—A	Stop	½	1277	28.60	1277	28.80	
		¾	2277	28.70	2277	29.00	77
2 Circuits 1 Open—A 1 Closed—B	Start	½	.....	.....	1262	33.80	
	Stop	¾	2262	33.70	2262	34.00	62
2 Circuits Open—A-B	Start	½	.....	.....	1265	33.80	
	Start	¾	2265	33.70	2265	34.00	65
2 Circuits Closed—A-B	Stop	½	.....	.....	1268	33.80	
	Stop	¾	2268	33.70	2268	34.00	68
1 Circuit Universal	Must be Specified*	½	.....	.....	1696	31.40	
		¾	2696	31.30	2696	31.60	596
2 Circuits Universal	Must be Specified*	½	.....	.....	1294	36.80	
		¾	2294	36.70	2294	37.00	194

★Order by catalog number. Use type and form number for identification of Condulets for hazardous locations when consulting Underwriters' Laboratories, Inc., List of Inspected Electrical Equipment.

‡Two-circuit push button stations are provided with a removable jumper for common line connection. It can be quickly removed for independent connections.

*Name plate markings must be specified.

†Combinations of push button stations can be furnished. Prices on application.

CROUSE-HINDS CONDULETS

EFS SERIES PUSH BUTTON STATION CONDULETS

Explosion-Proof and Dust-Tight

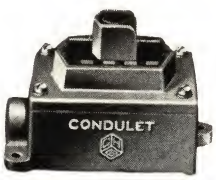
Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, and V)

The indicating plate marking for each of the units must be specified. Two styles of indicating plates are available; one for a single marking and one for two markings. Either one or two markings, selected from the list below, will be supplied at no additional charge. Markings other than those shown will be supplied at **$1.00** per word list additional.

START	RUN	TEST	FORWARD	UP	RAISE
STOP	JOG	HAND	REVERSE	DOWN	LOWER
ON	RESET	AUTO	OPEN	IN	LGT. ON
OFF	TRIP	EMER.	CLOSE	OUT	

Furnished with Motor Control Push Button Stations—Front Operated

Single Button Operates Both Buttons of the Push Button Station Simultaneously



EFS—Single-Gang



EFSC—Single-Gang

Push Button Station Information‡

600 Volts A.C. Maximum With Push Button Station

Normal Positions	Size Hub	Cat. No.	List, Each	Form ★
Type EFS Single-Gang—D120 Series Standard Duty				
2 Circuits 1 Open—A 1 Closed—B	½	EFS1155	$16.80	
	¾	EFS2155	16.90	55
	1	EFS3155	17.10	
2 Circuits Open—A-B	½	EFS1155B	16.80	
	¾	EFS2155B	16.90	55B
	1	EFS3155B	17.10	
2 Circuits Closed—A-B	½	EFS1155D	16.80	
	¾	EFS2155D	16.90	55D
	1	EFS3155D	17.10	
2 Circuits Universal	¾	EFS2192	18.40	192
	1	EFS3192	18.60	
Type EFSC Single-Gang—D120 Series Standard Duty				
2 Circuits 1 Open—A 1 Closed—B	½	EFSC1155	$17.00	
	¾	EFSC2155	17.20	55
	1	EFSC3155	17.60	
2 Circuits Open—A-B	½	EFSC1155B	17.00	
	¾	EFSC2155B	17.20	55B
	1	EFSC3155B	17.60	
2 Circuits Closed—A-B	½	EFSC1155D	17.00	
	¾	EFSC2155D	17.20	55D
	1	EFSC3155D	17.60	
2 Circuits Universal	½	EFSC1192	18.50	
	¾	EFSC2192	18.70	192
	1	EFSC3192	19.10	

★Order by catalog number. Use type and form number for identification of Condulets for hazardous locations when consulting Underwriters' Laboratories, Inc., List of Inspected Electrical Equipment.

‡Two-circuit push button stations are provided with a removable jumper for common line connection. It can be quickly removed for independent connections.

CROUSE-HINDS CONDULETS

EFD SERIES PUSH BUTTON STATION CONDULETS—FACTORY SEALED

Explosion-Proof and Dust-Tight

Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, and V)

EFD series Condulets utilize heavy duty, 600-volt A.C., factory sealed, single button universal push button stations. Each push button station may be connected for one circuit normally closed, one circuit normally open or two circuits, one normally closed and one normally open. One unit may be used for jogging service or two may be used to make up a "Start-Stop" push button station.

The name plate marking for each push button station must be specified.

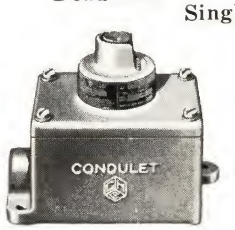
Certain standard markings are available at no extra charge. Special markings will be furnished at **$1.00** per word list additional. The standard markings available are as follows:

START	RUN	TEST	FORWARD	UP	RAISE
STOP	JOG	HAND	REVERSE	DOWN	LOWER
ON	RESET	AUTO	OPEN	IN	LGT. ON
OFF	TRIP	EMER.	CLOSE	OUT	

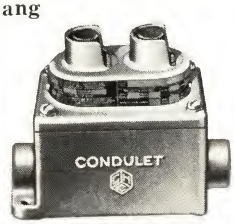
Push Button Station Rating—Heavy Duty, 600 Volts, A. C. Max.

Type EFD Dead End — **Type EFDC Through Feed**

Single-Gang



With One Push Button Station

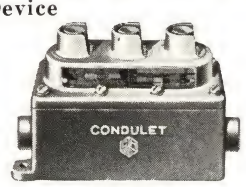


With Two Push Button Stations

Cat. No.	List, Each	No. of P.B. Stations	Size Hub	Cat. No.	List, Each
EFD-				EFDC-	
1437†	$19.30	1	½	1437†	$19.50
2437†	19.40		¾	2437†	19.70
3437†	19.60		1	3437†	20.10
1438†	29.70	2	½	1438†	29.90
2438†	29.80		¾	2438†	30.10
3438†	30.00		1	3438†	30.50

Three-Device





EFD-				EFDC-	
1453†	$44.90	3	½	1453†	$45.10
2453†	45.00		¾	2453†	45.30
3453†	45.20		1	3453†	45.70

Two-Gang Tandem



EFD-				EFDC-	
2454†	$59.50	4	¾	2454†	$59.80
3454†	59.70	4	1	3454†	60.20

†Specify indicating plate markings for each push button station. Refer to table above listing.

CROUSE-HINDS CONDULETS

EFS AND EFD SERIES SELECTOR SWITCH CONDULETS§

Explosion-Proof and Dust-Tight

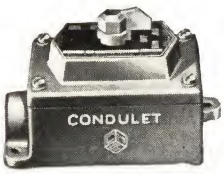
Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, and V)

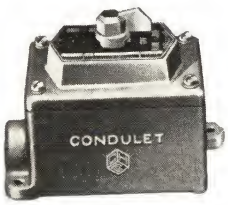
EFS and EFD series selector switch Condulets are provided with rotary type, maintained contact selector switches. Both two and three-position, two-circuit switches are used. These are especially useful in conjunction with motor control equipment.

The name plate marking for each selector switch must be specified. Standard markings are available at no extra charge. Special markings will be provided at **$1.00** list additional per five letter word or abbreviation. The standard markings are as follows:

Two-Position	Three-Position
RUN, JOG	RUN, OFF, JOG
AUTO, HAND	AUTO, OFF, HAND
FORW., REV.	FORW., OFF, REV.
FAST, SLOW	1, OFF, 2
OPEN, CLOSE	OPEN, OFF, CLOSE
UP, DOWN	UP, OFF, DOWN
OFF, ON	FAST, OFF, SLOW

Type EFS Standard Duty — **Type EFD Heavy Duty**





Switch Information

Cat. No.	List, Each	600-V. A.C. Max. Circuit	Size Hub	Cat. No.	List, Each
Two-Position, Two-Circuit					
EFS-				EFD-	
11001	$14.30	1-2	½	11008	$17.50
21001	14.40		¾	21008	17.60
31001	14.60		1	31008	17.80
11002	14.30	Off-1&2	½	11009	17.50
21002	14.40		¾	21009	17.60
31002	14.60		1	31009	17.80
Three-Position, Two-Circuit					
EFS-				EFD-	
11003	$14.30	1-Off-2	½	11010	$17.50
21003	14.40		¾	21010	17.60
31003	14.60		1	31010	17.80
11004	14.30	Off-1-2	½	.....	.....
21004	14.40		¾	.....	.....
31004	14.60		1	.....	.....
11005	14.30	Off-1&2-1	½	.....	.....
21005	14.40		¾	.....	.....
31005	14.60		1	.....	.....
11006	14.30	1-1&2-2	½	11011	17.50
21006	14.40		¾	21011	17.60
31006	14.60		1	31011	17.80
.....	.....	1&2-1-Off	½	11012	17.50
.....	.....		¾	21012	17.60
.....	.....		1	31012	17.80

§Combinations of selector switches or selector switches and pilot lights, push button stations, etc., can be furnished in multiple gang Condulets. Prices on application.

CROUSE-HINDS CONDULETS

EFS AND EFD SERIES PILOT LIGHT CONDULETS—FACTORY SEALED

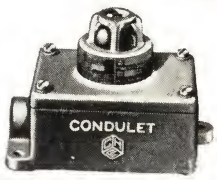
Explosion-Proof and Dust-Tight

Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, and V)

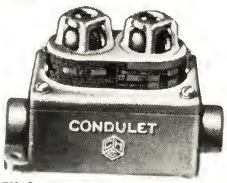
Equipped with candelabra base lamp receptacles, 125-volt, 6-watt type S-6 clear bulb lamps, for use on 110-125 volt circuits; and colored or clear glass jewels.

Dead End **Through Feed**

Single-Gang



With Single Pilot Light



With Double Pilot Lights

Cat. No.	List, Each	Size Hub	Cat. No.	List, Each
With Single Pilot Lights				
EFS1524-*	$15.60	½	EFSC1524-*	$15.80
EFS2524-*	15.70	¾	EFSC2524-*	16.00
EFS3524-*	15.90	1	EFSC3524-*	16.40
With Double Pilot Lights				
EFS1561-*	23.00	½	EFSC1561-*	23.20
EFS2561-*	23.10	¾	EFSC2561-*	23.40
EFS3561-*	23.30	1	EFSC3561-*	23.80

Three-Device†



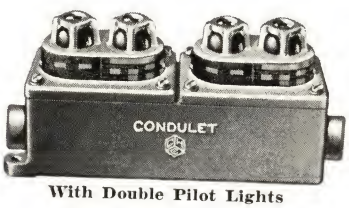
With Three Pilot Lights



With Three Pilot Lights

Cat. No.	List, Each	Size Hub	Cat. No.	List, Each
With Three Pilot Lights				
EFD1476-*	$35.90	½	EFDC1476-*	$36.10
EFD2476-*	36.00	¾	EFDC2476-*	36.30
EFD3476-*	36.20	1	EFDC3476-*	36.70

Two-Gang Tandem



With Double Pilot Lights

Cat. No.	List, Each	Size Hub	Cat. No.	List, Each
With Double Pilot Lights				
.....	.....	½	EFDC1477-*	$47.60
EFD2477-*	$47.50	¾	EFDC2477-*	47.80
EFD3477-*	47.70	1	EFDC3477-*	48.20

†Three-device and two-gang tandem Condulets are made only in the EFD deep type.

*Insert symbol for jewel colors.

Pilot light Condulets listed above are furnished with jewel guards. Condulets without jewel guards will be supplied at the same list prices. Add suffix S308 to the catalog number.

Symbols for Jewel Colors

Color	Red	Green	Amber	Opal	Clear	Blue
Symbol	J1	J3	J6	J8	J10	J11

CROUSE-HINDS CONDULETS

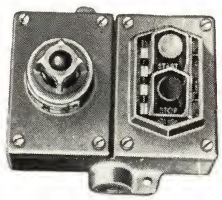
EFS SERIES COMBINATION PUSH BUTTON STATION AND PILOT LIGHT CONDULETS

Explosion-Proof and Dust-Tight

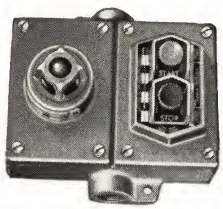
Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, and V)

Furnished with motor control push button stations, both standard and heavy duty, in combination with pilot lights. Push button stations are rated 600-volts A.C. maximum.

Pilot lights are equipped with candelabra base lamp receptacles and 125-volt, 6-watt type S6 clear bulb lamps, for use on 110-125-volt circuits.



Type EFS Two-Gang



Type EFSC Two-Gang

Push Button Station Information‡
600 Volts A.C. Maximum

Normal Positions	Plate Marking	Size Hub	Cat. No.	List, Each	Form ★
Type EFS Two-Gang—D120 Series Standard Duty					
			EFS-		
1 Circuit Open—A	Start	½	121-J1*	$29.90	1J
		¾	221-J1*	30.00	
		1	321-J1*	30.20	
1 Circuit Closed—A	Stop	½	122-J1*	29.90	2J
		¾	2202-J1*	30.00	
		1	322-J1*	30.20	
2 Circuits 1 Open—A 1 Closed—B	Start Stop	½	125-J1*	32.40	5J
		¾	225-J1*	32.50	
		1	325-J1*	32.70	
2 Circuits Open—A-B	Start Start	½	123-J1*	32.40	3J
		¾	2203-J1*	32.50	
		1	323-J1*	32.70	
2 Circuits Closed—A-B	Stop Stop	½	1205-J1*	32.40	05J
		¾	2205-J1*	32.50	
		1	3205-J1*	32.70	
2 Circuits Universal	Must be Specified†	¾	2858-J1*	34.00	458J
		1	3858-J1*	34.20	
Type EFSC Two-Gang—D120 Series Standard Duty					
			EFSC-		
1 Circuit Open—A	Start	½	121-J1*	$30.10	1J
		¾	221-J1*	30.30	
		1	321-J1*	30.70	
1 Circuit Closed—A	Stop	½	122-J1*	30.10	2J
		¾	2202-J1*	30.30	
		1	322-J1*	30.70	
2 Circuits 1 Open—A 1 Closed—B	Start Stop	½	125-J1*	32.60	5J
		¾	225-J1*	32.80	
		1	325-J1*	33.20	
2 Circuits Open—A-B	Start Start	½	123-J1*	32.60	3J
		¾	2203-J1*	32.80	
		1	323-J1*	33.20	
2 Circuits Closed—A-B	Stop Stop	½	1205-J1*	32.60	05J
		¾	2205-J1*	32.80	
		1	3205-J1*	33.20	
2 Circuits Universal	Must be Specified†	½	1858-J1*	34.10	458J
		¾	2858-J1*	34.30	
		1	3858-J1*	34.70	

*Order by catalog number. Use type and form number for identification of Condulets for hazardous locations when consulting Underwriters' Laboratories, Inc., List of Inspected Electrical Equipment. ‡Two-circuit push button stations are provided with a removable jumper for common line connection. It can be quickly removed for independent connections.

†Indicating plate marking must be specified.

*Catalog numbers listed above include red pilot light jewel (J1) in all cases. Where a different color is required substitute the proper color symbol. Example: EFSC225-J1 except with amber jewel is EFSC225-J6.

CROUSE-HINDS CONDULETS

EFD SERIES COMBINATION PUSH BUTTON STATION AND PILOT LIGHT CONDULETS FACTORY SEALED

Explosion-Proof and Dust-Tight

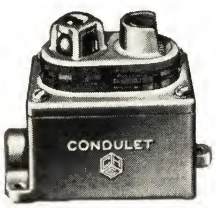
Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, and V)

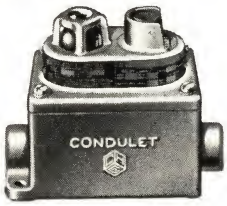
Ratings: Push Button Stations—Heavy Duty, 600 Volts A.C. Max.

Pilot Lights—6 Watts, 125 Volts, Candelabra Base

Dead End **Through Feed**

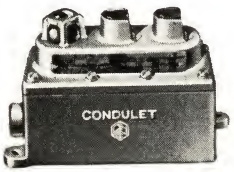
Single-Gang

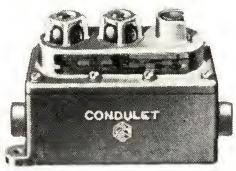




Cat. No.	List Each	Size Hub	Cat. No.	List Each
1 Push Button Station and 1 Pilot Light				
EFD1473-*†	$26.70	½	EFDC1473-*†	$26.90
EFD2473-*†	26.80	¾	EFDC2473-*†	27.10
EFD3473-*†	27.00	1	EFDC3473-*†	27.50

Three-Device





1 Push Button Station and 2 Pilot Lights				
EFD1474-*†	38.90	½	EFDC1474-*†	39.10
EFD2474-*†	39.00	¾	EFDC2474-*†	39.30
EFD3474-*†	39.20	1	EFDC3474-*†	39.70
2 Push Button Stations and 1 Pilot Light				
EFD1475-*†	41.90	½	EFDC1475-*†	42.10
EFD2475-*†	42.00	¾	EFDC2475-*†	42.30
EFD3475-*†	42.20	1	EFDC3475-*†	42.70

Two-Gang Tandem



2 Push Button Stations and 2 Pilot Lights				
EFD2472-*†	53.50	¾	EFDC2472-*†	53.80
EFD3472-*†	53.70	1	EFDC3472-*†	54.20

Table of Jewel Symbols

Color	Symbol	Color	Symbol
Red	J1	Opal	J8
Green	J3	Clear	J10
Amber	J6	Blue	J11

*Insert color symbol for pilot light jewels. Give symbol for each jewel where more than one is supplied.

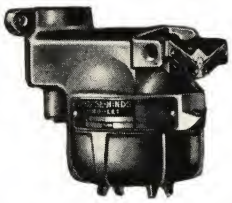
†Specify indicating plate marking for each push button station.

CROUSE-HINDS CONDULETS

TYPE OFC CONDULETS

For Oil Immersed or Air Break Devices Explosion-Proof, Dust-Tight, and Watertight

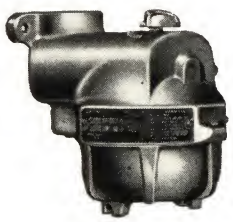
Class I, Group D (NEMA Types VII and VIII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, V, IV, and III)



Furnished with Motor Control Push Button Station

Push button station may be air break or oil immersed.

Push Button Station Information‡ Standard Duty 600-V. A.C. Max. Normal Positions	Handle Marking	Size Hub	Condulet with Push Button Station Cat. No.	List Each
Single Operating Handle				
1 Circuit		¾	OFC2101	$27.00
Open—A	Start	1	OFC3101	27.40
1 Circuit		¾	OFC2102	27.00
Closed—A	Stop	1	OFC3102	27.40
Double Operating Handle				
2 Circuits				
1 Open—A	Start	¾	OFC2103	$29.00
1 Closed—B	Stop	1	OFC3103	29.40
2 Circuits	Start	¾	OFC2104	29.00
Open—A-B	Start	1	OFC3104	29.40
2 Circuits	Stop	¾	OFC2105	29.00
Closed—A-B	Stop	1	OFC3105	29.40
2 Circuits	Must be	¾	OFC2133	30.50
Universal	Specified	1	OFC3133	30.90
Single Operating Handle Operating Both Buttons Together				
2 Circuits		¾	OFC2131	$29.00
Open—A-B	Start	1	OFC3131	29.40
2 Circuits		¾	OFC2132	29.00
Closed—A-B	Stop	1	OFC3132	29.40
2 Circuits	Must be	¾	OFC2139	30.50
Universal	Specified	1	OFC3139	30.90



Furnished with Maintained Contact Selector Switch

Specify Position Markings such as Automatic-Off-Hand, Hoist-Off-Lower, Reverse-Off-Forward, etc.

Two Circuit Switch, Standard Duty 600 V. A.C. Max.

Switch Only Circuit	Diagram	Condulet with Switch Size Hubs	Cat. No.	List Each**
2 Position—2 Circuit				
1-2		¾	OFC2251	$30.00
		1	OFC3251	30.40
Off-1&2		¾	OFC2252	30.00
		1	OFC3252	30.40
3 Position—2 Circuit				
1-Off-2		¾	OFC2361	30.00
		1	OFC3361	30.40
Off-1-2		¾	OFC2363	30.00
		1	OFC3363	30.40
Off-1&2-1		¾	OFC2364	30.00
		1	OFC3364	30.40
1-1&2-2		¾	OFC2365	30.00
		1	OFC3365	30.40

‡Two-circuit push button stations provided with jumper for common line connection. Can be quickly removed for independent connections. **Includes plate marking as specified.

CROUSE-HINDS CONDULETS

TYPE EGP CONDULETS

Explosion-Proof, Dust-Tight For Panel Mounting

Factory-Sealed

Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, and V)



Furnished with 1-inch through-feed hubs.

Pilot Lights: Pilot light Condulets are equipped with candelabra base lamp receptacles, 125-volt, 6-watt, type S-6 clear bulb lamps, for use on 110-125-volt circuits; and colored or clear glass jewels.

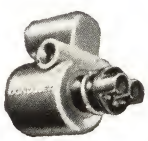
Push Button Stations: Heavy duty, 600-volt A.C., factory-sealed, single button universal push button stations are used. Each push button station may be connected for one circuit normally closed, one circuit normally open, or two circuits, one normally closed and one normally open. One unit may be used for jogging service or two may be used to make up a "Start-Stop" push button station.



Switch Diagram

No. of Push Button Stations	No. of Pilot Lights	Cat. No.	List Each
Single-Gang—Style 1			
--	1	EGP311-*	$16.00
1	--	EGP3011-†	19.00
Two-Gang—Style 1			
--	2	EGP312-*	32.00
2	--	EGP3012-†	38.00
1	1	EGP3117-*†	35.00
Three-Gang—Style 1			
--	3	EGP313-*	48.00
3	--	EGP3013-†	57.00
1	2	EGP3127-*†	51.00
2	1	EGP3217-*†	54.00
Four-Gang—Style 1			
--	4	EGP3115-*	64.00
4	--	EGP3014-†	76.00
1	3	EGP3137-*†	67.00
2	2	EGP3227-*†	70.00
3	1	EGP3317-*†	73.00

TYPE EGP PUSH BUTTON SWITCH CONDULETS



The type EGP Condulets listed below are equipped with standard maintained contact push button switches.

Style	125 Volts	250 Volts	H.P.	Plate Marking	Condulet with Switch Cat. No. EGP-	List Each
1-Pole	20T-A.	10-A.	--	On-Off	3141	$32.10
2-Pole	20T-A.	20-A.	2	On-Off	3142	32.30
3-Way	15T-A.	10-A.	--	----------	3143	32.90
4-Way	5T-A.	2-A.	--	----------	3144	38.70

*To catalog number add suffix -J1 for red; -J3 for green; -J6 for amber; -J8 for opal; -J10 for clear; and -J11 for blue.

†Specify indicating plate marking for each push button station.

CROUSE-HINDS CONDULETS

TYPE EGP COMBINATION PUSH BUTTON SWITCH AND PILOT LIGHT CONDULETS

Explosion-Proof and Dust-Tight

Class I, Groups C and D (NEMA Types VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, and V)



Style 4



Style 4

Style	Amperes 125-V.	Amperes 250-V.	H.P.	Plate Marking	Cat. No. EGP-	List Each
With One Pilot Light						
1-Pole	20T	10	--	On-Off	3811-*	$49.40
2-Pole	20T	20	2	On-Off	3812-*	49.60
3-Way	15T	10	--	----------	3813-*	50.20
4-Way	5T	2	--	----------	3814-*	56.00
DP, DT (No Off)	10	5	--	†Must be Specified	3815-*	63.00
With Two Pilot Lights						
1-Pole	20T	10	--	On-Off	3821-*	65.40
2-Pole	20T	20	2	On-Off	3822-*	65.60
3-Way	15T	10	--	----------	3823-*	66.20
4-Way	15T	2	--	----------	3824-*	72.00
DP, DT (No Off)	10	5	--	†Must be Specified	3825-*	79.00

SELECTOR SWITCH CONDULETS

Provided with rotary type, maintained contact selector switches. Both two and three-position, two-circuit switches are used. These are especially useful in conjunction with motor control equipment.

The indicating plate marking for each selector switch must be specified. Standard markings are available at no extra charge. Special markings will be provided at **$1.00** per word list additional. The standard markings are as follows:



Style 3

Two-Position
RUN, JOG
AUTO, HAND
FORWARD, REV.
FAST, SLOW
OPEN, CLOSE
UP, DOWN
OFF, ON
RAISE, LOWER
IN, OUT

Three-Position
RUN, OFF, JOG
AUTO, OFF, HAND
FORWARD, OFF, REV.
1, OFF, 2
OPEN, OFF, CLOSE
UP, OFF, DOWN
FAST, OFF, SLOW

1-inch through feed hubs.

Switch Information

Standard Duty—600 Volts A.C. Maximum

Plate Marking	Circuit	Cat. No. EGP-	List Each
2 Position—2 Circuit			
Specify indicating plate markings. Refer to listing of standard markings above.	1-2	EGP3151	$34.00
	Off-1&2	EGP3152	34.00
3 Position—2 Circuit			
	1-Off-2	EGP3153	34.00
	Off-1-2	EGP3154	34.00
	Off-1&2-1	EGP3155	34.00
	1-1&2-2	EGP3156	34.00

*To catalog number add suffix -J1 for red; -J3 for green; -J6 for amber; -J8 for opal; -J10 for clear; and -J11 for blue.

†Specify indicating plate marking for each push button station.

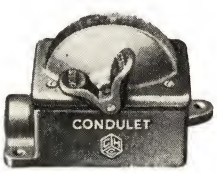
CROUSE-HINDS CONDULETS

FS SERIES PUSH BUTTON STATION CONDULETS

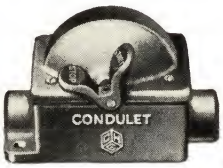
Furnished with Motor Control Push Button Stations—Rocker Type Operating Handle

Watertight

NEMA Types III, IV, V



Type FS—Dead End



Type FSC—Through Feed

Push Button Switch Information*
600 Volts A.C. Maximum

Normal Positions	Plate Marking	Size Hub	Cat. No.	List Each
Type FS-D120 Series Standard Duty				
1 Circuit Open-A	Start	½	FS1810F	$10.30
		¾	FS2810F	10.50
1 Circuit Closed-A	Stop	½	FS1810G	10.30
		¾	FS2810G	10.50
2 Circuits 1 Open-A 1 Closed-B	Start } Stop }	½	FS1810	12.30
		¾	FS2810	12.50
2 Circuits Universal	Must be Specified	½	FS1810U	13.80
		¾	FS2810U	14.00
Type FS-D113 Series Heavy Duty				
1 Circuit Open-A	Start	½	FS1813F	15.80
		¾	FS2813F	16.00
1 Circuit Closed-A	Stop	½	FS1813G	15.80
		¾	FS2813G	16.00
2 Circuits 1 Open-A 1 Closed-B	Start } Stop }	½	FS1813	17.80
		¾	FS2813	18.00
2 Circuits Universal	Must be Specified	½	FS1813U	19.30
		¾	FS2813U	19.50
Type FSC-D120 Series Standard Duty				
1 Circuit Open-A	Start	½	FSC1810F	10.50
		¾	FSC2810F	10.80
1 Circuit Closed-A	Stop	½	FSC1810G	10.50
		¾	FSC2810G	10.80
2 Circuits 1 Open-A 1 Closed-B	Start } Stop }	½	FSC1810	12.50
		¾	FSC2810	12.80
2 Circuits Universal	Must be Specified	½	FSC1810U	14.00
		¾	FSC2810U	14.30
Type FSC-D113 Series Heavy Duty				
1 Circuit Open-A	Start	½	FSC1813F	16.00
		¾	FSC2813F	16.30
1 Circuit Closed-A	Stop	½	FSC1813G	16.00
		¾	FSC2813G	16.30
2 Circuits 1 Open-A 1 Closed-B	Start } Stop }	½	FSC1813	18.00
		¾	FSC2813	18.30
2 Circuits Universal	Must be Specified	½	FSC1813U	19.50
		¾	FSC2813U	19.80

*Two-circuit push button stations are furnished with a jumper for common line connection. It can be quickly removed for independent connections. Other push button stations can be furnished. Prices on application.

Other hub arrangements or hub sizes can be furnished by using Condulet bodies of the FS series, with special tapping for larger cover screws. Prices on application.

Overall Dimensions, exclusive of hubs: Length, 4 3/32 inches; width, 2¾ inches; depth, 4 inches.

CROUSE-HINDS CONDULETS

FS AND FD SERIES PILOT LIGHT CONDULETS AND COMBINATION PUSH BUTTON STATION AND PILOT LIGHT CONDULETS

Weather Resistant (Raintight)

NEMA Types III and V

With Cast Feraloy Covers



Single Pilot Light

Single Pilot Light Condulets

Furnished with jewel cover, candelabra type lamp receptacle, 120-v., 6-w., S-6 clear lamp, and 50-60 cycle transformer for circuit voltage above 110.

Size Hub	Circuit Voltage	Type FS Cat. No.	Type FS List Each	Type FSC Cat. No.	Type FSC List Each
½	110	FS180(*)	$6.50	FSC180(*)	$6.70
¾	110	FS280(*)	6.70	FSC280(*)	7.00
		Type FD		**Type FDC**	
½	220	FD181(*)	12.70	FDC181(*)	12.90
¾	220	FD281(*)	12.90	FDC281(*)	13.30
½	440	FD182(*)	12.70	FDC182(*)	12.90
¾	440	FD282(*)	12.90	FDC282(*)	13.30
½	550	FD183(*)	12.70	FDC183(*)	12.90
¾	550	FD283(*)	12.90	FDC283(*)	13.30



Two-Gang Combination

Two-Gang Combination Push Button Station and Pilot Light Condulets

Furnished with D120 standard duty, 600-v. A.C. maximum, start-stop push button station with front operated push button cover; pilot light receptacle with jewel cover, candelabra type lamp receptacle, 120-v., 6-w., S-6 clear lamp, and 50-60 cycle transformer for circuit voltage above 110.

Size Hub	Circuit Voltage	Type FS Cat. No.	Type FS List Each	Type FSC Cat. No.	Type FSC List Each
½	110	FS1635(*)	$19.80	FSC1635(*)	$20.90
¾	110	FS2635(*)	19.90	FSC2635(*)	21.10
		Type FD		**Type FDC**	
½	220	FD1637(*)	26.20	FDC1637(*)	27.30
¾	220	FD2637(*)	26.30	FDC2637(*)	27.50
½	440	FD1638(*)	26.20	FDC1638(*)	27.30
¾	440	FD2638(*)	26.30	FDC2638(*)	27.50
½	550	FD1639(*)	26.20	FDC1639(*)	27.30
¾	550	FD2639(*)	26.30	FDC2639(*)	27.50

*To catalog number add suffix for jewel color; -J1 for Red, -J3 for Green, -J6 for Amber, -J8 for Opal, -J10 for Clear, -J11 for Blue.

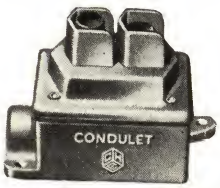
CROUSE-HINDS CONDULETS

FS SERIES PUSH BUTTON STATION CONDULETS

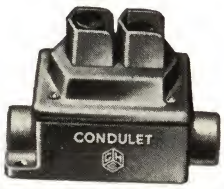
Furnished with Motor Control Push Button Stations—Front Operated

Weather Resistant (Raintight)

NEMA Types III and V



Type FS—Dead End



Type FSC Through Feed

Push Button Switch Information*
600 Volts A.C. Maximum

Normal Positions	Plate Marking	Size Hub	Cat. No.	List Each
Type FS-D120 Series Standard Duty				
1 Circuit Open-A	Start	½	FS1910F	$10.30
		¾	FS2910F	10.50
1 Circuit Closed-A	Stop	½	FS1910G	10.30
		¾	FS2910G	10.50
2 Circuits 1 Open-A 1 Closed-B	Start Stop	½	FS1910	12.30
		¾	FS2910	12.50
2 Circuits Universal	Must be Specified	½	FS1910U	13.80
		¾	FS2910U	14.00
Type FS-D113 Series Heavy Duty				
1 Circuit Open-A	Start	½	FS1913F	15.80
		¾	FS2913F	16.00
1 Circuit Closed-A	Stop	½	FS1913G	15.80
		¾	FS2913G	16.00
2 Circuits 1 Open-A 1 Closed-B	Start Stop	½	FS1913	17.80
		¾	FS2913	18.00
2 Circuits Universal	Must be Specified	½	FS1913U	19.30
		¾	FS2913U	19.50
Type FSC-D120 Series Standard Duty				
1 Circuit Open-A	Start	½	FSC1910F	10.50
		¾	FSC2910F	10.80
1 Circuit Closed-A	Stop	½	FSC1910G	10.50
		¾	FSC2910G	10.80
2 Circuits 1 Open-A 1 Closed-B	Start Stop	½	FSC1910	12.50
		¾	FSC2910	12.80
2 Circuits Universal	Must be Specified	½	FSC1910U	14.00
		¾	FSC2910U	14.30
Type FSC-D113 Series Heavy Duty				
1 Circuit Open-A	Start	½	FSC1913F	16.00
		¾	FSC2913F	16.30
1 Circuit Closed-A	Stop	½	FSC1913G	16.00
		¾	FSC2913G	16.30
2 Circuits 1 Open-A 1 Closed-B	Start Stop	½	FSC1913	18.00
		¾	FSC2913	18.30
2 Circuits Universal	Must be Specified	½	FSC1913U	19.50
		¾	FSC2913U	19.80

*Two-circuit push button stations are furnished with a jumper for common line connection. It can be quickly removed for independent connections. Other push button stations can be furnished. Prices on application.

Other hub arrangements or hub sizes can be furnished by using Condulet bodies of the FS series, with special tapping for larger cover screws. Prices on application.

Overall Dimensions, exclusive of hubs: Length, 4 9/32 inches; width, 2¾ inches; depth, 4 inches.

CROUSE-HINDS CONDULETS

FS AND FD SERIES PILOT LIGHT CONDULETS AND COMBINATION PUSH BUTTON STATION AND PILOT LIGHT CONDULETS

Weather Resistant (Raintight)

NEMA Types III and IV

With Cast Feraloy Covers

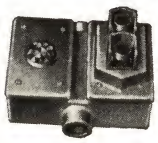


Single Pilot Light

Single Pilot Light Condulets

Furnished with jewel cover, candelabra type lamp receptacle, 120-v., 6-w., S-6 clear lamp, and 50-60 cycle transformer for circuit voltage above 110.

Hub Size	Voltage Circuit	Type FS No.	Type FS Each	Type FSC No.	Type FSC Each
½	110	FS180(*)	$6.50	FSC180(*)	$6.70
¾	110	FS280(*)	6.70	FSC280(*)	7.00
		Type FD		**Type FDC**	
½	220	FD181(*)	12.70	FDC181(*)	12.90
¾	220	FD281(*)	12.90	FDC281(*)	13.30
½	440	FD182(*)	12.70	FDC182(*)	12.90
¾	440	FD282(*)	12.90	FDC282(*)	13.30
½	550	FD183(*)	12.70	FDC183(*)	12.90
¾	550	FD283(*)	12.90	FDC283(*)	13.30



Two-Gang Combination

Two-Gang Combination Push Button Station and Pilot Light Condulets

Furnished with D120 standard duty, 600-v. A.C. maximum, start-stop push button station with front operated push button cover; pilot light receptacle with jewel cover, candelabra type lamp receptacle, 120-v., 6-w., S-6 clear lamp, and 50-60 cycle transformer for circuit voltage above 110.

Size Hub	Circuit Voltage	Type FS No.	Type FS Each	Type FSC No.	Type FSC Each
½	110	FS1635(*)	$19.80	FSC1635(*)	$20.90
¾	110	FS2635(*)	19.90	FSC2635(*)	21.10
		Type FD		**Type FDC**	
½	220	FD1637(*)	26.20	FDC1637(*)	27.30
¾	220	FD2637(*)	26.30	FDC2637(*)	27.50
½	440	FD1638(*)	26.20	FDC1638(*)	27.30
¾	440	FD2638(*)	26.30	FDC2638(*)	27.50
½	550	FD1639(*)	26.20	FDC1639(*)	27.30
¾	550	FD2639(*)	26.30	FDC2639(*)	27.50

*To catalog number add suffix for jewel color; -J1 for Red, -J3 for Green, -J6 for Amber, -J8 for Opal, -J10 for Clear, -J11 for Blue.

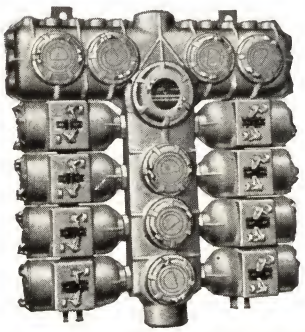
CROUSE-HINDS PANELBOARDS

TYPE EDP PANELBOARDS WITH CIRCUIT BREAKERS

Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)

Class I, Group D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IX, V, and III)

Furnished with Thermal Branch Circuit Breakers, Main Lugs, and Terminal Connection Blocks



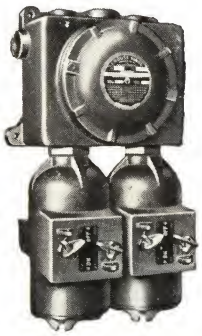
Type EDP panelboards are especially designed for use in hazardous locations. They may also be used in non-hazardous locations where corrosive vapors, non-combustible dusts, or moisture are present.

All EDP panels are wired complete. Connections between terminal blocks and circuit breakers are made at the factory. Each circuit breaker compartment is sealed from the "T" section.

All EDP panelboards are provided with 3-inch through feed main hubs. Size 1 panelboards have 12 1-inch branch hubs while Size 2 panelboards have 16 1-inch branch hubs.

*15-Ampere Branch Circuit Breakers (E Frame)

No. Breakers	Cat. No.	List Each	Cat. No.	Panel Size
Mains—3-W., 125-250-V. A.C. or D.C.			**Mains**—4-W., 120-208-V., 3-Ph.	
Branches—2-W., 125-V. A.C. or D.C. Solid Neutral			**Branches**—2-W., 120-V., 1-Ph. Solid Neutral	
Breakers—Single-Pole				
6	EDP406-15	$372.00	EDP506-15	1
8	EDP408-15	428.00	EDP508-15	1
10	EDP410-15	485.00	EDP510-15	1
12	EDP412-15	542.00	EDP512-15	1
14	EDP414-15	653.00	EDP514-15	2
16	EDP416-15	710.00	EDP516-15	2
Mains—3-W., 125-250-V. A.C. or D.C.			**Mains**—3-W., 125-250-V. A.C. or D.C.	
Branches—2-W., 125-V. A.C. or D.C.			**Branches**—3-W., 125-250-V. A.C. or D.C. Solid Neutral	
Breakers—Two-Pole				
4	EDP204-15	436.00	EDP304-15	1
6	EDP206-15	543.00	EDP306-15	1
8	EDP208-15	707.00	EDP308-15	2
Mains—2-W., 125-V. A.C. or D.C.‡			**Mains**—4-W., 120-208-V., 3-Ph.	
Branches—2-W., 125-V. A.C. or D.C.‡			**Branches**—3-W., 120-208-V., 1-Ph. Solid Neutral	
Breakers—Two-Pole				
4	EDP104-15	436.00	EDP804-15	1
6	EDP106-15	543.00	EDP806-15	1
8	EDP108-15	707.00	EDP808-15	2
Mains—3-W., 125-250-V. A.C. or D.C.‡			**Mains**—4-W., 120-208-V., 3-Ph.	
Branches—3-W., 125-250-V. A.C. or D.C.‡			**Branches**—4-W., 120-208-V., 3-Ph. Solid Neutral	
Breakers—Three-Pole				
4	EDP604-15	540.00	EDP1104-15	1
6	EDP606-15	750.00	EDP1106-15	2



TYPE ESP PANELBOARDS WITH CIRCUIT BREAKERS

Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight) Class I, Groups C and D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IX, V, and III)

Furnished with thermal branch circuit breakers, main lugs, and terminal connection blocks.

*15-Ampere Branch Circuit Breakers (E Frame)

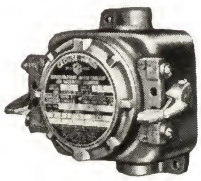
No. Breakers	Cat. No.	List Each	Cat. No.
Mains—3-W., 125-250-V. A.C. or D.C.			**Mains**—4-W., 120-208-V., 3-Ph.
Branches—2-W., 125-V. A.C. or D.C. Sold Neutral			**Branches**—2-W., 120-V., 1-Ph. Solid Neutral
Breakers—Single-Pole			
4	ESP404-15	$200.00	----------
4	----------	210.00	ESP504-15
Mains—3-W., 125-250-V. A.C. or D.C.			**Mains**—3-W., 125-250-V. A.C. or D.C.
Branches—2-W., 125-V. A.C. or D.C.			**Branches**—3-W., 125-250-V. A.C. or D.C. Solid Neutral
Breakers—Two-Pole			
2	ESP202-15	210.00	ESP302-15
Mains—3-W., 125-250-V. A.C. or D.C.			**Branches**—3-W., 125-250-V. A.C. or D.C.
Breakers—Three-Pole			
2	ESP602-15	240.00	----------

TYPE GUSC CIRCUIT BREAKER LOAD CENTER CONDULETS

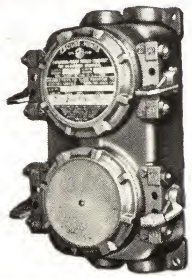
Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)

Class I, Group D (NEMA Type VII) Class II, Groups E, F, and G; and Class III (NEMA Types IX, V, and III)*

Furnished with Type MO Multi-breakers.



Type GUSC Single-Gang



Type GUSC Two-Gang

Circuit Breaker Information: No. Breakers	Poles	Ampere Rating†	Size Hub	Conduit with Circuit Breaker Neutral Connection Block: Grounded Cat. No.	Ungrounded Cat. No.	List Each
Type GUSC Single-Gang				GUSC-	GUSC-	
1	1	15	¾	2251	2252	$35.00
2	1	15	¾	2281	2282	44.00
1	2	15	¾	2331	2332	38.00
Type GUSC Two-Gang						
3	1	15	¾	2361	2362	75.00
4	1	15	¾	2471	2472	84.00
2	2	15	¾	2571	2572	72.00

Type ESP panelboards have one 1½-inch main conduit opening and four 1-inch branch conduit openings. Furnished with necessary pipe plugs.

*Panelboards with all 20 or 30-ampere breakers can be furnished at the same list prices. 40 or 50-ampere breakers, or combinations of 15 through 50-ampere breakers, can be furnished. Prices on application.

†Condulets with 20 or 30-ampere breakers can be furnished at the same list prices.

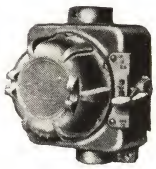
*Single-Gang GUSC Condulets are also suitable for Class I, Group C locations.

‡These panelboards may be used on 250-volts A.C. They are labeled for 125-volts as this is the highest voltage available at Underwriters' Laboratories, Inc., for short circuit tests of these breakers in explosion-proof enclosures.

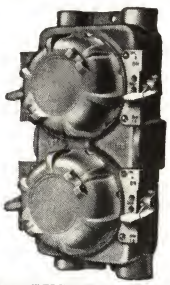
CROUSE-HINDS CONDULETS

TYPE GUSC CIRCUIT BREAKER LOAD CENTER CONDULETS—Continued

Furnished with Thermal Magnetic "Quicklag" Circuit Breakers, 125-250 Volts A.C.



Type GUSC Single-Gang



Type GUSC Two-Gang

Circuit Breaker Information				Condulet With Circuit Breaker Neutral Connection Block		
				Grounded	Ungrounded	
No. Breakers	Poles	Ampere Rating†	Size Hub	Cat. No.	Cat. No.	List Each
Type GUSC Single-Gang*						
1	1	10	1	GUSC-3110-10	GUSC-3111-10	$35.00
1	1	15	1	3110-15	3111-15	35.00
2	1	10	1	3210-10	3211-10	44.00
2	1	15	1	3210-15	3211-15	44.00
1	2	10	1	3120-10	3121-10	38.00
1	2	15	1	3120-15	3121-15	38.00
Type GUSC Two-Gang						
3	1	10	1	3310-10	3311-10	75.00
3	1	15	1	3310-15	3311-15	75.00
4	1	10	1	3410-10	3411-10	84.00
4	1	15	1	3410-15	3411-15	84.00
2	2	10	1	3220-10	3221-10	72.00
2	2	15	1	3220-15	3221-15	72.00

TYPE DVSP PANELBOARDS WITH CIRCUIT BREAKERS

Dust-Tight and Weather Resistant (Raintight) Class II, Groups E, F, and G; and Class III (NEMA Types IX, V, and III)

Furnished with Thermal Branch Circuit Breakers, Pressure Type Main Lugs, Neutral Terminal Connection Block, and Conduit Openings.



Type DVSP With Two Single Pole Circuit Breakers Form A



Type DVSP With Three Double-Pole Circuit Breakers Form B



Type DVSP With Six Single-Pole Circuit Breakers Form B

***15-Ampere Branch Circuit Breakers (E Frame)**

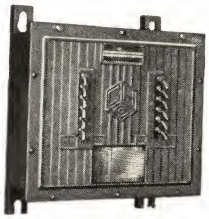
No. Breakers	Cat. No.	List Each	Cat. No.	Form
Mains—3-W., 125-250-V. A.C. or D.C.			**Mains**—4-W., 120-208-V., 3-Ph.	
Branches—2-W., 125-V. A.C. or D.C. Solid Neutral			**Branches**—2-W., 120-V., 1-Ph. Solid Neutral	
Breakers—Single-Pole				
2	DVSP402-15	$74.00	----------	A
3	DVSP403-15	144.00	DVSP503-15	B
4	DVSP404-15	157.00	DVSP504-15	B
5	DVSP405-15	170.00	DVSP505-15	B
6	DVSP406-15	183.00	DVSP506-15	B

TYPE DLP PANELBOARDS WITH CIRCUIT BREAKERS

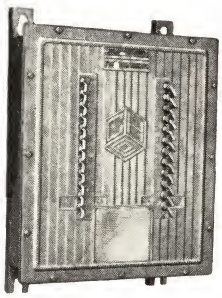
Dust-Tight and Weather Resistant (Raintight) Class II, Groups E, F, and G; and Class III (NEMA Types IX, V, and III)

Furnished with Thermal-Magnetic (Quicklag) Branch Circuit Breakers, Pressure Type Main Lugs, Neutral Terminal Connection Block, and Conduit Openings.

Cast Aluminum Housings. List prices include a maximum of one conduit opening for each branch circuit and one for main conduit. Tapped conduit openings with threaded-in bushings will be provided. Send sketch showing the number, size and location of openings desired.



Type DLP Panelboard Form A



Type DLP Panelboard Form B

***15-Ampere Branch Circuit Breakers**

No. Breakers	Cat. No.	List Each	Cat. No.	Form
Mains—3-W.,125-250-V. A.C.			**Mains**—4-W., 120-208-V., 3-Ph.	
Branches—2-W., 125-V. A.C. Solid Neutral			**Branches**—2-W., 120-V., 1-Ph. Solid Neutral	
Breakers—Single-Pole				
6	DLP406-15	$264.00	DLP506-15	A
8	DLP408-15	280.00	DLP508-15	A
10	DLP410-15	296.00	DLP510-15	A
12	DLP412-15	312.00	DLP512-15	A
14	DLP414-15	404.00	DLP514-15	B
16	DLP416-15	420.00	DLP516-15	B
18	DLP418-15	436.00	DLP518-15	B
20	DLP420-15	452.00	DLP520-15	B
22	DLP422-15	468.00	DLP522-15	B
24	DLP424-15	484.00	DLP524-15	B

TYPE YSW CIRCUIT BREAKER LOAD CENTER CONDULETS—Without Hub Plates

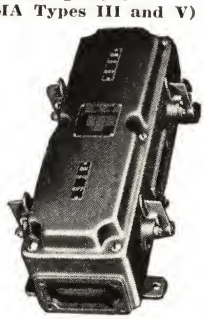
Weather Resistant (Raintight)—(NEMA Types III and V)

Furnished with Connection Block, Gaskets for Hub Plates, and Thermal Branch Circuit Breakers.

Take YYP7 removable conduit hub plates. Single-pole YSW Condulets, Form 1, available with 2 circuit breakers. Information on request.



Form 1



Form 3

Amps.	Single-Pole No.	Each	Two-Pole No.	Each
YSW Form 1				
1 Circuit Breaker				
15	YSW1115	$33.40	YSW1215	$49.80
20	YSW1120	33.40	YSW1220	49.80
30	YSW1130	33.40	YSW1230	49.80
40	YSW1140	35.40	YSW1240	49.80
YSW Form 3				
	4 Circuit Breakers		**2 Circuit Breakers**	
15	YSW4115	109.60	YSW2215	107.60
20	YSW4120	109.60	YSW2220	107.60
30	YSW4130	109.60	YSW2230	107.60
40	YSW4140	117.60	YSW2240	107.60

*Panelboards with all 20 or 30-ampere breakers can be furnished at the same list prices. 40 or 50-ampere breakers, or combinations of 15 through 50-ampere breakers, can be furnished. Prices on application. †**Single-gang** Condulets with 20, 30, or 40-ampere breakers and **two-gang** Condulets with 20 or 30-ampere breakers can be furnished at the same list prices. ***Single-gang** GUSC Condulets are also suitable for Class I, Group C locations.

T & B FLOOR BOXES

NON-ADJUSTABLE WATERTIGHT FLOOR BOXES

Approved by Underwriters' Laboratories



No screws to take out to assemble this box, no careful matching of screw holes in gasket and box. Receptacle plate locks in place with a single twist, and the cover plate goes on with another. Boxes 1700 and 1701 are furnished with a receptacle (10 amp., 250 volts or 15 amp., 125 volts) and blank cover disc.

No. 1703 has no receptacle, but is supplied with a flat cover disc drilled and tapped for ½-inch, complete with plug.

Standard conduit drilling is four holes on sides and two on bottom, tapped for ½-inch, with four holes plugged. Holes drilled and tapped for ¾-inch will be supplied, when specified, at no extra charge.

Height with cover: $3\frac{3}{16}$ inches; diameter of cover plate: 3¾ inches.

Cat. No.	Description	Unit Pkg.	Std. Pkg.	Wt.Lbs. Each	Price Each
1703	Telephone or Signal	1	10	2	**$3.45**
1700	Two-wire	1	12	2	**4.50**
1701	Three-wire	1	10	2¼	**6.25**

#1708 Bell Nozzle extra.

MECHANICALLY ADJUSTABLE WATERTIGHT FLOOR BOXES

Approved by Underwriters' Laboratories



No. 1760

These boxes are the essence of simplicity to install. There is no loss of time holding the adjusting ring to the finished floor level waiting for the cement to harden or for the concrete to be poured. This is all taken care of mechanically.

T & B Adjustable Floor Boxes have a ⅝-inch vertical and a 10-degree angular adjustment. The covers are mechanically grounded to the box.

Box No. 1760 is furnished with a two-wire receptacle (10-amp, 250 volts) and a blank cover disc. Box No. 1761 is similar to No. 1760, except that it is supplied with a three-wire receptacle. No receptacle is supplied with No. 1763, but it has a flat cover disc drilled and tapped for ½-inch conduit, complete with plug.

Standard conduit drilling is four holes on sides, tapped for ½-inch conduit with two holes plugged. Holes drilled and tapped for ¾-inch conduit will be supplied, when specified, at no extra charge.

Height with cover: 3⅝ inches maximum; 3-inch minimum. Diameter of cover: 4 inches.

Cat. No.	Description	Unit Pkg.	Std. Pkg.	Wt.Lbs. Each	Price Each
1760	Two-wire	1	‡	4	**$8.15**
1761	Three-wire	1	‡	4	**10.30**
1763	Telephone or Signal	1	‡	4	**7.50**

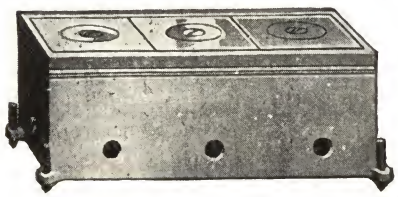
‡$60.00 net value.

T & B RECTANGULAR GANG FLOOR BOXES

ADJUSTABLE AND WATERTIGHT BOXES

1, 2 and 3-Gangs for Light, Power and Communications

Listed Under Reexamination Service of Underwriters' Laboratories



These boxes have a double mechanical adjustment: Floor form adjustment by adjusting screw in ear at each corner of box; floor level adjustment by adjusting screws in cover frames. Covers have no unsightly screws. The cover is metallically grounded to the box. Boxes are heavily gasketed and are watertight.

Standard equipment of these boxes is a combination ½-inch and 2-inch cover plate with each gang. Receptacles, nozzles and other accessories extra. Adjustment: ⅝-inch vertical; 10° angular. Minimum height overall 3⅞ inches; width $4\frac{5}{16}$ inches.

Cat. No.	Description	Length Inches	Std. Pkg.	Wt. Lbs. Each	Price Each
1810	One Gang	$4\frac{5}{16}$	$60	9	**$10.00**
1820	Two Gang	8⅜	Net	16	**19.40**
1830	Three Gang	$12\frac{7}{16}$	Value	24	**28.75**

FLOOR BOX PARTS AND ACCESSORIES

Cat. No.	Description	Price Each
1706	Cover	**$1.40**
1707	Disc	**1.05**
1708	Bell Nozzle	**.80**
1709	Disc with ½-inch Hole and Plug	**1.40**
1711	Large Rubber Gasket	**.20**
1712	Small Rubber Gasket	**.20**
1715	Two-wire Receptacle with Sup. Plates and Screws	**1.40**
1716	Three-wire Receptacle with 2 screws	**2.40**
1737	Adjusting Ring and Screws	**2.40**
1738	Adjusting Rubber Gasket	**.70**
1739	Bushed Triple Nozzle	**1.75**
1740	Shallow Box Body	**4.90**
1741	Sheet Metal Box Protector	**.70**
1746	¾-inch Plug with screw driver slot	**.20**
1747	Extension Piece, ½-inch size, 4 inches long	**1.75**
1748	½-inch Plug with screw driver slot	**.15**
1749	1-inch Plug with screw driver slot	**.25**
1816	Square Cover	**4.15**

Bushed Extension Piece can be furnished in any length. Extensions furnished in ¾- and 1-inch stock, any length, when specified.

RALCO RECEPTACLES AND PLUGS

SWITCH BLADE CONTACT TYPE CIRCUIT BREAKING

The Switch Blade Contact Type of Receptacles and Plugs, as their name implies, have flat contact construction. The contacts are liberally proportioned for their rated capacity; are made of phosphor bronze; are self-aligning, self-cleaning and are easily renewed.

When circuit is broken the arc is confined to the contact chambers, thereby eliminating the possibility of a flash-over and undue pitting of contacts.

The Pin and Sleeve Contact Type, as the name implies, have pin and sleeve contacts of ample size for their rated capacity and are self-aligning.

The receptacle contacts of both types are mounted in heavy molded Phenolic insulating compound which is heat and arc-resisting and moisture-proof.

Receptacle housings of both types are carefully machined, making them easy to install. The receptacle housings are cast iron cadmium finished.

Plugs

The plug housings used with both the switch blade contact type and the pin and sleeve contact type are carefully machined, giving correct alignment. The contacts of the plugs are mounted in the same quality of insulators as used in the receptacles. They are provided with an extra contact for grounding the portable equipment through the conduit system or other means. They are also equipped with a cord grip, which takes off all strain on wire connections to terminals of plugs.



Type A

SWITCH BLADE CONTACT TYPE

2, 3 and 4-Pole

250 V., D.C. 600 V., A.C.

30-100 Ampere



Type AN

Type A Receptacles

Cat. No.	Amp.	No. of Poles	Size Conduit	Use Plug No.	Price Each Receptacle Only	Price Each Plug* Only
221A1	30	2	½	PRG221	$7.25	$6.15
221A2	30	2	¾	PRG221	7.35	6.15
321A2	30	3	¾	PRG321	7.85	6.80
321A3	30	3	1	PRG321	7.95	6.80
321A4	30	3	1¼	PRG321	8.15	6.80
421A3	30	4	1	PRG421	8.75	7.60
421A4	30	4	1¼	PRG421	8.95	7.60
222A3	60	2	1	PRG222	11.65	8.75
222A4	60	2	1¼	PRG222	11.75	8.75
322A4	60	3	1¼	PRG322	12.75	9.50
322A5	60	3	1½	PRG322	12.85	9.50
422A5	60	4	1½	PRG422	14.85	10.50
103A5†	100	3	1½	103-P	18.85	15.50

Type AN Watertight Receptacles

221AN1	30	2	½	PRGN221	7.60	6.75
221AN2	30	2	¾	PRGN221	7.70	6.75
321AN2	30	3	¾	PRGN321	8.20	7.40
321AN3	30	3	1	PRGN321	8.30	7.40
321AN4	30	3	1¼	PRGN321	8.50	7.40
421AN3	30	4	1	PRGN421	9.10	8.20
421AN4	30	4	1¼	PRGN421	9.30	8.20
222AN3	60	2	1	PRGN222	11.85	9.75
222AN4	60	2	1¼	PRGN222	11.95	9.75
322AN4	60	3	1¼	PRGN322	12.95	10.50
322AN5	60	3	1½	PRGN322	13.05	10.50
422AN5	60	4	1½	PRGN422	15.05	11.50
103AN5†	100	3	1½	103-PN	19.05	16.50

*Specify outside diameter of portable cord used.
†For Disconnecting only.

RALCO RECEPTACLES AND PLUGS

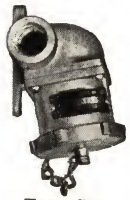


Type C

SWITCH BLADE CONTACT TYPE

2, 3 and 4-Pole

350 Volt D.C.
600 Volt A.C.
30-100 Ampere



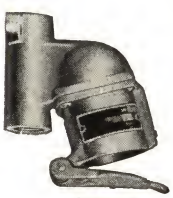
Type CN

Type C Receptacles

Cat. No.	Amp.	No. of Poles	Size Conduit	Use Plug No.	Price Each Receptacle Only	Price Each Plug* Only
221C11	30	2	½	PRG221	$7.55	$6.15
221C22	30	2	¾	PRG221	7.65	6.15
321C22	30	3	¾	PRG321	8.15	6.80
321C33	30	3	1	PRG321	8.25	6.80
421C33	30	4	1	PRG421	9.05	7.60
222C33	60	2	1	PRG222	11.95	8.75
222C44	60	2	1¼	PRG222	12.05	8.75
322C44	60	3	1¼	PRG322	13.05	9.50
322C55	60	3	1½	PRG322	13.15	9.50
422C55	60	4	1½	PRG422	15.15	10.50
103C55†	100	3	1½	103-P	19.15	15.50

Type CN Watertight Receptacles

221CN11	30	2	½	PRGN221	7.90	6.75
221CN22	30	2	¾	PRGN221	8.00	6.75
321CN22	30	3	¾	PRGN321	8.50	7.40
321CN33	30	3	1	PRGN321	8.60	7.40
421CN33	30	4	1	PRGN421	9.40	8.20
222CN33	60	2	1	PRGN222	12.15	9.75
222CN44	60	2	1¼	PRGN222	12.25	9.75
322CN44	60	3	1¼	PRGN322	13.25	10.50
322CN55	60	3	1½	PRGN322	13.35	10.50
422CN55	60	4	1½	PRGN422	15.35	11.50
103CN55†	100	3	1½	103-PN	19.35	16.50

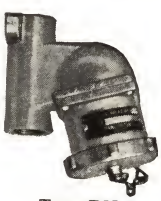


Type D

SWITCH BLADE CONTACT TYPE

2, 3 and 4-Pole

250 Volt D.C.
600 Volt A.C.
30–100 Amp.



Type DN

Type D Receptacles

Cat. No.	Amp.	No. of Poles	Size Conduit	Use Plug No.	Price Each Receptacle Only	Price Each Plug* Only
221D11	30	2	½	PRG221	$7.70	$6.15
221D22	30	2	¾	PRG221	7.80	6.15
321D22	30	3	¾	PRG321	8.30	6.80
321D33	30	3	1	PRG321	8.40	6.80
421D33	30	4	1	PRG421	9.20	7.60
222D33	60	2	1	PRG222	12.10	8.75
222D44	60	2	1¼	PRG222	12.20	8.75
322D44	60	3	1¼	PRG322	13.20	9.50
322D55	60	3	1½	PRG322	13.30	9.50
422D55	60	4	1½	PRG422	15.30	10.50
103D55†	100	3	1½	103-P	19.30	15.50

Type DN Watertight Receptacles

221DN11	30	2	½	PRGN221	8.05	6.75
221DN22	30	2	¾	PRGN221	8.15	6.75
321DN22	30	3	¾	PRGN321	8.65	7.40
321DN33	30	3	1	PRGN321	8.75	7.40
421DN33	30	4	1	PRGN421	9.55	8.20
222DN33	60	2	1	PRGN222	12.30	9.75
222DN44	60	2	1¼	PRGN222	12.40	9.75
322DN44	60	3	1¼	PRGN322	13.40	10.50
322DN55	60	3	1½	PRGN322	13.50	10.50
422DN55	60	4	1½	PRGN422	15.50	11.50
103DN55†	100	3	1½	103-PN	19.50	16.50

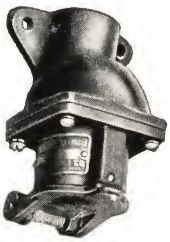
*Specify outside diameter of portable cord used.
†For Disconnecting only.

RALCO RECEPTACLES AND PLUGS

PIN AND SLEEVE CONTACT TYPE

2, 3 and 4-Pole

30 Amperes, 250 Volts A.C.



Type A



Type C

The Receptacles and Plugs listed below are the Pin and Sleeve Contact type. Other than the Contacts, they are similar in construction to the Switch Blade Contact type.

This type will be found satisfactory for use as outlets for portable cords and portable tools, either ordinary or high frequency.

The various types of receptacle housings, viz: A, AN, C, CN, D and DN, are similar in design to Switch Blade Contact type, except smaller.

The listing of this line of receptacles and plugs is limited. If complete listing is desired, ask for RALCO Line Bulletins No. 101-B and 105-B.

Type A with Self Closing Cover

Cat. No.	No. of Poles	Size Conduit	Use Plug No.	Price Each Receptacle Only	Price Each Plug Only
52 A1	2	½	52 PA	$3.30	$2.80
52 A2	2	¾	52 PA	3.40	2.80
53 A2	3	¾	53 PA	4.35	3.40
54 A3	4	1	54 PA	5.25	5.00

Type AN with Screw Cover—Watertight

52 AN1	2	½	52 PAN	3.50	3.20
52 AN2	2	¾	52 PAN	3.60	3.20
53 AN2	3	¾	53 PAN	4.55	3.70
54 AN3	4	1	54 PAN	5.35	5.80

Type C with Self Closing Cover

Cat. No.	No. of Poles	Size Conduit	Use Plug No.	Price Each Receptacle Only	Price Each Plug Only
52 C11	2	½	52 PA	$3.50	$2.80
52 C22	2	¾	52 PA	3.60	2.80
53 C22	3	¾	52 PA	4.55	3.40
54 C33	4	1	54 PA	5.45	5.00

Type CN with Screw Cover—Watertight

52 CN11	2	½	52 PAN	3.70	3.20
52 CN22	2	¾	52 PAN	3.80	3.20
53 CN22	3	¾	53 PAN	4.75	3.70
54 CN33	4	1	54 PAN	5.55	5.80

Type D with Self Closing Cover

Cat. No.	No. of Poles	Size Conduit	Use Plug No.	Price Each Receptacle Only	Price Each Plug Only
52 D11	2	½	52 PA	$3.50	$2.80
52 D22	2	¾	52 PA	3.60	2.80
53 D22	3	¾	53 PA	4.55	3.40
54 D33	4	1	54 PA	5.45	5.00

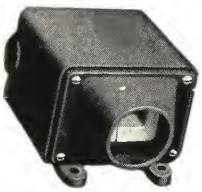
Type DN with Screw Cover—Watertight

52 DN11	2	½	52 PAN	3.70	3.20
52 DN22	2	¾	52 PAN	3.80	3.20
53 DN22	3	¾	53 PAN	4.75	3.70
54 DN33	4	1	54 PAN	5.55	5.80

RALCO RECEPTACLES AND PLUGS

HEAVY DUTY RECEPTACLES AND PLUGS

Consist of heavy porcelain blocks on which are mounted phosphor bronze contacts. The receptacle units are mounted in cast iron case. Plugs are made of hard maple, impregnated with an insulating and waterproof compound.



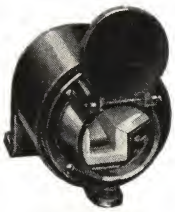
No. 21-E

2-Wire, 30 Amp., 250 Volt

Cat. No.	Use Plug No.	Receptacle Only	Plug Only
21-E	1*	$4.90	$1.30
21-EC	1*	5.50	1.30
21-EG	2-G†	5.50	2.40
21-ECG	2-G†	6.00	2.40
21-XE	1*	7.10	1.30
21-XEC	1*	7.60	1.30
21-XEG	2-G†	7.60	2.40
21-XECG	2-G†	8.10	2.40

3-Wire, 30 Amp., 250 Volt

Cat. No.	Use Plug No.	Receptacle Only	Plug Only
10-E	10-EC†	$8.70	$3.30
10-EC	10-EC†	9.20	3.30
10-ECG	10-ECG†	9.70	4.00
10-XE	10-EC†	9.50	3.30
10-XEC	10-EC†	10.00	3.30
10-XECG	10-ECG†	10.50	4.00



No. 10-EC



No. 18-XEC

3-Wire, 30 Amp., 250 Volt

Cat. No.	Use Plug No.	Receptacle Only	Plug Only
18-E	18†	$12.90	$5.00
18-EC	18†	13.40	5.00
18-XE	18†	13.30	5.00
18-XEC	18†	14.30	5.00

*Reversible. †Non-reversible.

Letter E indicates extension; EC, extension and cover; X, 4 outlets—3 with removable plugs; G indicates separate contact for ground. All receptacles and plugs listed above can be furnished for 600 volts, at same prices, when so ordered.

RALCO INTERLOCKED RECEPTACLES AND PLUGS



Receptacle

The Ralco Interlocked Receptacles and Plugs fused and not fused. The receptacle consists of an improved safety switch and a No. 42 Ralco receptacle unit mounted in a cast aluminum case. The switch receptacle and plug are so interlocked that: (a) the switch cannot be closed until the plug is inserted and pushed home to correct position; (b) the plug cannot be withdrawn until the switch is in "full off" position; (c) when plug is withdrawn the switch is automatically locked to "full off" position: (d) door of the case cannot be opened until switch is in "full off" position.

250 Volts, D.C., 500 Volts, A.C.

No Fuse Cat. No.	Amps.	Receptacle Only	Fused Cat. No.	Amps.	Receptacle Only
42–N–451	30	$64.00	42–F–421	30	$65.00
42	60	54.00	42–F	60	65.00

600 Volts A.C. or D.C.

42–N–461	30	65.00	42–F–462	30	72.00
42–N–462	60	65.00	42–F–462	60	72.00

Plugs

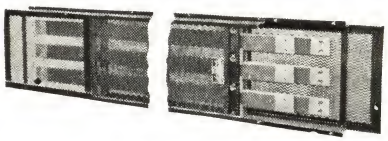
No. 42 Plug used with all Interlocked Receptacles listed above, **$10.00.**

BULLDOG BUStribution DUCT SYSTEMS

VENTILATED LO-X FEEDER DUCT

Ventilated "Lo-X" BUStribution Duct is designed for efficient power and lighting feeder runs as well as for welders and other large inductive loads. It materially reduces voltage drop, operating temperatures and operating costs.

It is available in capacities from 800 to 4000 amperes, for 2 pole, 3 pole and 3 phase 4 pole service, 600 volts or less, A.C. or D.C.



Standard 10-Foot Duct Sections

Amp. Rating	Three Pole Cat. No.	Wt. Lb.	List Each	3 Phase, 4 Pole (Neutral—½ Rating) Cat. No.	Wt. Lb.	List Price
800	VXD308	165	$194.00	VXD408	195	$242.00
1000	VXD310	205	254.00	VXD410	235	315.00
1350	VXD313	240	315.00	VXD413	275	375.00
1600	VXD316	285	375.00	VXD416	325	436.00
2000	VXD320	325	436.00	VXD420	365	496.00
2500	VXD325	390	581.00	VXD425	445	666.00
3000	VXD330	460	847.00	VXD430	525	968.00
4000	VXD340	700	1331.00	VXD440	800	1573.00

Elbows*

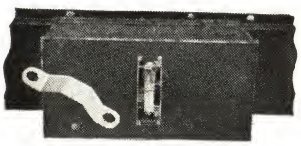
800	EL308	.....	$97.00	EL408	.....	$121.00
1000	EL310	.....	97.00	EL410	.....	121.00
1350	EL313	.....	97.00	EL413	.....	121.00
1600	EL316	.....	97.00	EL416	.....	121.00
2000	EL320	.....	97.00	EL420	.....	121.00

End Closers

800	EC308	.....	18.00	EC408	.....	18.00
1000	EC310	.....	19.00	EC410	.....	19.00
1350	EC313	.....	20.00	EC413	.....	20.00
1600	EC316	.....	22.00	EC416	.....	22.00
2000	EC320	.....	.....	EC420	.....	.....

*Prices cover Manufacturing Labor only. Material footage must be added.

VACU-BREAK "BOS" SWITCH PLUGS



Amp. Rating	2 Pole 230V. AC., 250V. DC. Cat. No.	List Each	3 Pole 230V. AC. Cat. No.	List Each
30	BOS14221	$ 34.00	BOS14321	$ 38.00
60	BOS14222	38.00	BOS14322	43.00
100	BOS14223	58.00	BOS14323	66.00
200	BOS14224	101.00	BOS14324	111.00
400	BOS14225	207.00	BOS14325	222.00

	3 Pole 575V. AC.		3 Ph., 4 Pole 230V. AC.	
30	BOS14351	$ 38.00	BOS16421	$ 45.00
60	BOS14352	43.00	BOS16422	49.00
100	BOS14353	72.00	BOS16423	80.00
200	BOS14354	125.00	BOS16424	131.00
400	BOS14355	253.00	BOS16425	245.00

BULLDOG BUStribution DUCT SYSTEMS

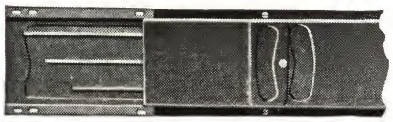
COVER-OPERATED TYPE "BP" BUS PLUGS



Rating	2 Pole 230V. AC., 250V. DC. Cat. No.	List Each	3 Pole 230V. AC. Cat. No.	List Each
30	BP221	$ 24.00	BP321	$ 26.00
60	BP222	24.00	BP322	26.00
100	BP2237	35.00	BP3237	36.00

	3 Pole 575V. AC.		3 Ph., 4 Pole 230V. AC.	
30	BP351	$ 26.00	BP421	$ 39.00
60	BP352	26.00	BP422	39.00
100	BP3537	43.00	BP4237	53.00

TYPE "BD" PLUG-IN DUCT



Prefabricated Type "BD" Plug-in BUStribution DUCT offers great flexibility in the distribution system. It can be quickly installed, rearranged or relocated without loss of component parts.

Branch circuit plus plugs can be readily inserted in the plug-in openings, five of which are located on each side of standard ten foot sections. Available in capacities from 225 to 1350 amperes, 2 or 3 poles — 600 volts AC and DC, and three phase 4 pole — 250 volts.

Standard 10-Foot Sections

Amp. Rating	3 Pole Cat. No.	List Each	3 Ph., 4 Pole (Neutral ½ Rating) Cat. No.	List Each
225	BDP302	$ 69.00	BDP402	$ 92.00
400	BDP304	110.00	BDP404	145.00
600	BDP306	139.00	BDP406	173.00
800	BDP308	208.00	BDP408	254.00
1000	BDP310	254.00	BDP410	318.00

Elbows and Tees*

Amp. Rating	3 Pole Elbows Cat. No.	List Each	3 Pole Tees Cat. No.	List Each
225	LDP302	$ 73.00	TDP302	$ 87.00
400	LDP304	73.00	TDP304	87.00
600	LDP306	73.00	TDP306	87.00
800	LDP308	73.00	TDP308	87.00
1000	LDP310	73.00	TDP310	87.00

*Prices cover Manufacturing Labor only. Material footage must be added.

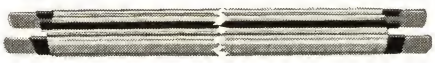
Listings on this page are representative only. A complete complement of fittings and accessories necessary to make up a complete distribution system are available.

BULLDOG Trol-E-Duct SYSTEMS

UNIVERSAL TYPE

Universal Trol-E-Duct is a flexible lighting system which is also suited for feeding small single-phase tools. Essentially it consists of standardized duct sections enclosing two copper bus bars. Plugs and trolleys can tap current from any point along the slotted duct length.

DUCT SECTIONS



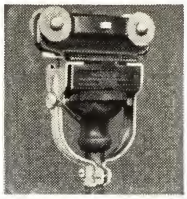
Rated capacity: 50A., 250V. Available in five lengths measured from ends of busbars.

Cat. No.	Length Feet	List Each
D710	10	$9.00
D705	5	7.50

PLUGS AND TROLLEYS



TPG712

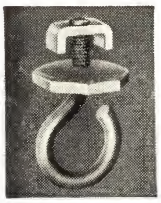


RTG712

Terminal type devices are used where connection is likely to be permanent; Receptacle type for easy disconnect.

Plugs 120V., 20A. A.C.—15A. D.C.

Cat. No.	Description	List Each
TPG712	Terminal	$2.50
PBG711	Terminal (with outlet box)	4.20
RPG713	Receptacle (no cord clamp)	2.00
	Trolleys 20A., 250V. AC-DC	
TTG712	Terminal	4.00
TBG711	Terminal (with outlet box)	5.50
RTG712	Receptacle	4.00



WEIGHT SUPPORT

Inserted in the Duct, it supports loads such as lighting fixtures, transformers, etc., up to 75 lbs.

Price, No. WS710B
Weight Support ....each $0.50

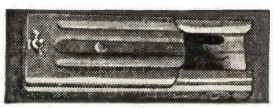
HANGERS

Hanger without hooks is for mounting against ceiling; hooks are for use with messenger service.



Cat. No.	Description	List Each
H710-0	No Hooks	$0.15
H210-2	1¼" Hooks	.40
H210-4	3¼" Hooks	.40

END CAPS



End Cap TEC210 (illustrated) is for trolley entrance; other end caps are for feeding short runs.

Cat. No.	Description	List Each
TEC210	Trolley Entrance	$1.70

BULLDOG Trol-E-Duct SYSTEMS

DUCT COUPLINGS

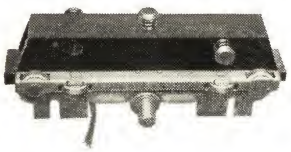


C710

Standard Couplings

Cat. No.	Type	List Each
C710	Plain	$2.00
	Feed-In Couplings	
FCB711	Standard	10.00
SFB711	Sectionalized	10.00
EFB711	End Feed	8.50

TROLLEYS



Rating: Trolleys Only, 575 V. or less; Standard type, 30 amp. Heavy Duty type, 60 amp.

Poles	Trolleys Only Cat. No.	Trolleys Only List Each	With Plain Tool Hangers Cat. No.	With Plain Tool Hangers List Each	With Box Tool Hangers Cat. No.	With Box Tool Hangers List Each
			Standard Type			
2	T131	$19.00	T13101	$29.00	T13102	$33.00
3	T331	22.00	T33101	32.00	T33102	36.00
			Heavy Duty			
2	T132	31.00	T13201	41.00	T13202	45.00
3	T332	36.00	T33201	46.00	T33202	50.00

INDUSTRIAL TYPE—DUCT SECTIONS



Industrial Trol-E-Duct is a mobile electrical system providing a constant source of electrical power for cranes, hoists, portable tools and other moving loads. It carries current through copper bus bars enclosed in insulated steel duct. Current is collected by trolleys to which are wired the driven equipment.

Poles	Length Feet	Standard Section Cat. No.	Standard Section List Each	Drop Out Section Cat. No.	Drop Out Section List Each
		Rated: 90A., 575 Volts or Less			
2	10	TRD210-44	$55.00	TRD210R-44	$65.00
3	10	TRD310-44	60.00	TRD310R-44	70.00

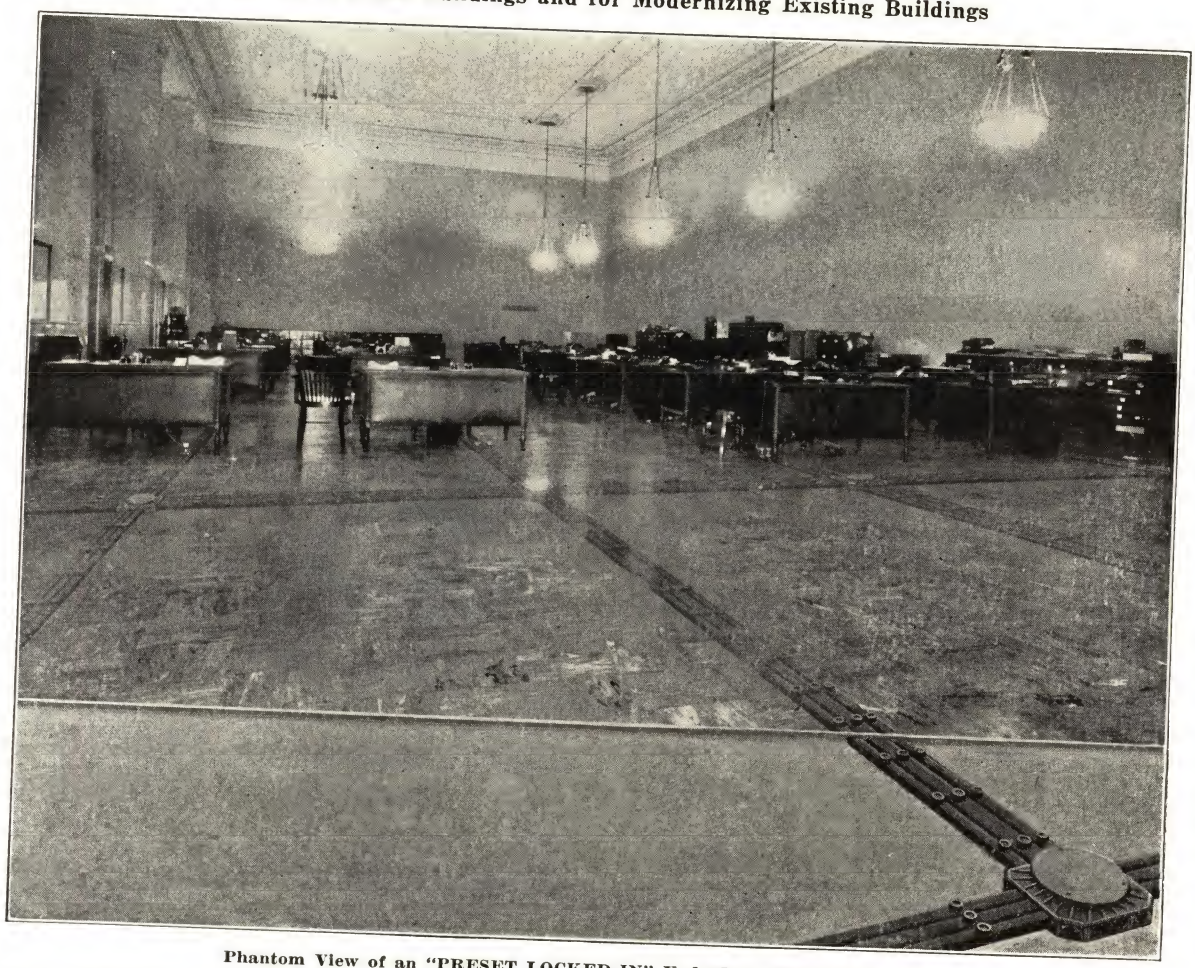
ACCESSORIES

One Hanger and Connector Assembly is included in price of each 10-ft. section.

Cat. No.	Description	
TRH3	Hanger Assembly	$5.00
TRF3	Feed-in Adaptor	10.00
TRB23	End Closer and Bumper	3.50

WALKER "PRESET LOCKED-IN" UNDERFLOOR DISTRIBUTION SYSTEMS

For New Office Buildings and for Modernizing Existing Buildings



Phantom View of an "PRESET LOCKED-IN" Underfloor Distribution System

The "PRESET LOCKED-IN" System in general consists of a network of rectangular steel ducts, single or multiple with inserts cast in the floor. Each length of duct is equipped with "PRESET" inserts applied in the course of manufacture, at regular closely spaced uniform intervals. This forms a continuous concealed steel raceway with outlets for wires of the various services from the center of distribution to the surface of the floor at the point of application, constantly available without disturbing the floor structure.

The practical advantage, economy and convenience of these "PRESET" regularly spaced inserts are readily apparent. The use of steel for this raceway meets the highest standards of safety by insuring the continuity of the metallic ground throughout the system. Locating this system in the floor solves all problems of appearance and availability. Confusion, dirt and noise are practically eliminated in making connections during occupancy of the building.

The advantages of the system are not limited to new construction. The flush system has been designed to make it entirely practical to secure the same desirable features in existing offices and buildings.

The flush type of duct may be installed in finished floors quickly and efficiently; and once accomplished, will make it possible to secure the important advantages of the standard Underfloor Distribution Systems.

DUCT



No. 1



No. 2

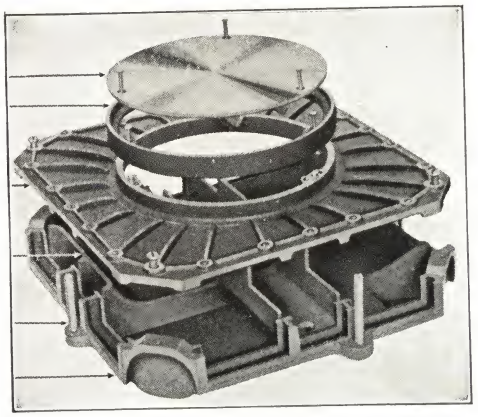
14 gauge cold rolled steel, sherardized and enameled. Threaded type "Preset" inserts 24 inches on centers, 1.3 inches in diameter for No. 1 duct, and 1.9 inches in diameter for No. 2 duct. Inserts 1 inch in height unless otherwise ordered.

Inserts of special diameters and heights can be furnished to order. Shipping weight—No. 1 duct, 160 pounds per 100 feet; No. 2 duct, 210 pounds per 100 feet.

Prices and detailed information on request.

WALKER "PRESET LOCKED-IN" UNDERFLOOR DISTRIBUTION SYSTEMS

JUNCTION BOXES



Sherardized grey iron castings, protected with chemical-resistant finish, provided with opening on the 4 sides for either 1, 2 or 3 ducts as required and in the arrangement required. Adjustable top assembly to suit types of floor and height of inserts. Adjusting screws for leveling. All corners can be drilled and tapped for conduit feeders. Special boxes for all types of service can be furnished to order.

Single Duct Boxes

Cat. No.	Description	Shpg. Wt. Lbs. Each
11	For No. 1 Duct	15
12	For No. 2 Duct	14

2 Duct Boxes

222	For No. 2 Duct	27
221	For No. 1 and 2 Ducts	24

3 Duct Boxes

3222	For No. 2 Duct	43
3212	For No. 1 and 2 Ducts	41
3221	For No. 1 and 2 Ducts	41



DUCT COUPLINGS

Cat. No.	Description	Shpg. Wt. Per 100
301	For No. 1 Duct	46
302	For No. 2 Duct	66

MARKER CAPS

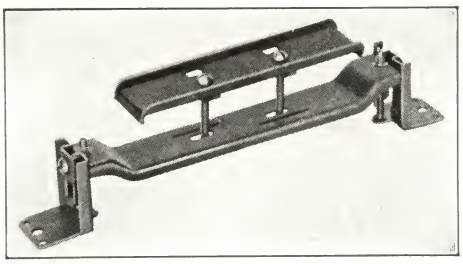
Marker cap for locating preset inserts under floor covering.

Cat. No.	Description	Shpg. Wt. Per 100
411-B	For 1.3-Inch Inserts	7
412-B	For 1.9-Inch Inserts	8



Prices and detailed information on request.

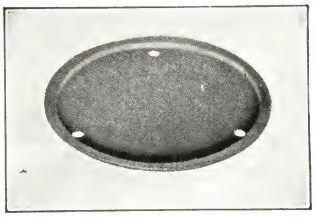
DUCT SUPPORTS



Stamped steel. Vertical and horizontal adjustments, locking screws, and mounting holes. Arranged for 1, 2 or 3 duct systems as required. Vertical members furnished in accordance with thickness of floor slab.

Average shipping weight per 100 pieces, 125 pounds.

LINOLEUM HOLDERS



Brass holder for floor coverings such as linoleum.

Depth as ordered.

Cat. No.	Size In.	Shpg. Wt. Per 100
11-LH	4	33
12-LH	6	55
222-LH	7	83
3222-LH	10	150

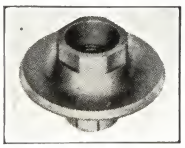
SERVICE FITTINGS



Cast brass service fittings.

Cat. No.	Description	Shpg. Wt. Per 100
601	Low Tension	73
612	High Tension	80

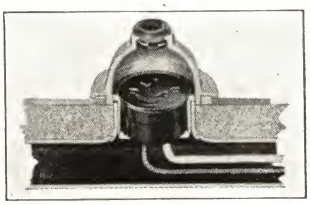
SUPPORTS



Cast brass service fitting supports.

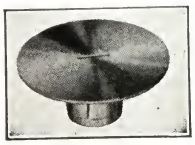
Cat. No.	For Insert Diam. In.	Shank Lgth. In.	Shpg. Wt. Per 100
1110	1.3	1	46
1110-L	1.3	1½	53
1120	1.9	1	57
1120-L	1.9	1½	94

FLUSH FITTINGS



Polarized flush floor receptacle for use in 1.9-inch insert only.

Cat. No.	Description	Shpg. Wt. Per 100
912-P	10 Amp., 2 Pole	30
913-P	10 Amp., 3 Pole	30
901	Low Tension	21



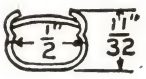
BLANKING PLATES

Cast brass blanking plates.

Cat. No.	For Insert Diam. In.	Shank Lgth. In.	Shpg. Wt. Per 100
1012	1.3	1	16
1023	1.9	1	30

WIREMOLD RACEWAY AND FITTINGS

No. 200 WIREMOLD RACEWAY



WIRE CAPACITY

Single Conductor: Type R or RH—2 No. 12; 3 No. 14; 4 No. 16; 4 No. 18. Type T or RU—3 No. 12; 3 No. 14; 6 No. 16; 8 No. 18.

.025-inch steel, standard Wiremold finish. Furnished in 5-ft. lengths with coupling. Packed 100 feet to carton. Weight per 1000 feet, 150 pounds (5 ft. lengths).

No. **200** Wiremold .....per foot **$ .134**

No. **200-F** Flexible Section (18-in.) per 100 **206.00**

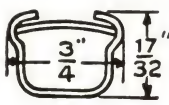
No. 200 WIREMOLD FITTINGS

Installation Fittings	Cat. No.	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std.Pkg.	Price Per 100
201			Coupling		
	201	100	10	½	$2.40
202	1½ inches long.				
			Bushing		
203	202	200	50	½	2.70
			Supporting Clip		
205	203	200	50	½	3.60
	2½ inches long.				
			One Hole Strap		
206	205	200	50	1	2.00
			Connection Cover		
211	206	200	50	1	2.20
			90° Flat Elbow		
	211	50	5	2¼	27.00
211	Legs 1¼ inches long.				
LH			Internal Twisted Elbow		
			(For 90° Twist with 90° Turn)		
	211-LH	20	5	1½	50.30
211	Legs 2 inches long.				
RH			Internal Twisted Elbow		
			(For 90° Twist with 90° Turn)		
	211-RH	20	5	1½	50.30
214	Legs 2 inches long.				
			Pull Box		
	214	20	5	1½	28.50
	5 inches long.				
217			Adjustable Internal Elbow		
	217	50	5	5½	34.80
	Legs 3 inches long.				
			External Elbow		
218	218	50	5	2¼	30.30
	Legs ⅞ inches long.				
			Adjustable Junction Box		
228	228	20	5	2⅛	62.90
	2½"L.—¾"W.—⅞"D.				
			S.P. Switch with Box		
			10A., 125V.; 5A., 250V.		
240	240	40	1	11½	175.70
	3¼"L.—1⅝"W.—$\frac{31}{32}$"D.				
			Utility Box		
242	242	20	1	3¼	86.00
	3¼"L.—1⅝"W—⅞"D.				
			Duplex Receptacle		
243			15A., 125V.; 10A., 250V.		
	243	40	1	9	128.80
	3¼"L.—1⅝"W.—⅞"D.				
			Extension Adapter		
251	251	20	1	5½	95.20
	4¾"L.—3"W.—½"D.				
			Reducing Connector		
289	289	20	5	1	25.00
289			Adapter		
A	289-A	40	10	1	3.60
			Take-off Kit*		
	200-19	5	1	5	242.00

*Consists of one No. 251 Extension Adapter, a 15-inch length of No. 200 Wiremold, a No. 1989A Reducing Connector, and Wiring Harness of No. 12 Type R Conductors. Everything necessary to extend from existing wall outlet to No. 1900.

WIREMOLD RACEWAY AND FITTINGS

No. 500 WIREMOLD RACEWAY



WIRE CAPACITY

Single Conductor: Type R or RH—2 No. 10; 3 No. 12; 4 No. 14; 6 No. 16; 6 No. 18. Type T or RU—2 No. 8; 4 No. 10; 6 No. 12; 6 No. 14; 10 No. 16; 10 No. 18.

.040-inch steel. Standard Wiremold finish. Furnished in 10-ft. lengths with coupling. Packed 100 feet to carton. Weight per 1000 feet, 320 pounds.

No. **500** Wiremold .....per foot **$0.157**

No. 500 WIREMOLD FITTINGS

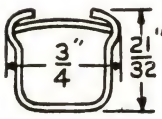
Installation Fittings	Cat. No.	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std.Pkg.	Price Per 100
502			Bushing		
	502	200	50	½	$3.00
504			One or Two Hole Strap		
	504	500	50	9	2.20
506			Connection Cover		
	506	200	50	1¾	2.20
			90° Flat Elbow		
511	511	100	5	14½	24.50
	Legs 2 inches long.				
			45° Flat Elbow		
512	512	20	5	1½	33.80
	Legs ⅞ inches long.				
			Tee		
	515	50	5	8¼	43.80
	3¾"L.—2"W.—¾"D.				
			Adjustable Internal Elbow		
515	517	100	5	19	32.60
	Legs 2⅛ inches long. One leg scored.				
			Adjustable External Elbow		
	518	100	5	14	26.50
517	Legs 2⅛ inches long. One leg scored.				
			Corner Box		
	519	20	5	4¼	74.70
518			Keyless Receptacle		
	526	40	1	15	110.80
	(600W250V)				
599			Plug Receptacle		
	527	40	5	13½	150.30
	(15A125V, 10A250V)				
			Open Work Coupling		
	588	20	5	3¼	58.00
			Connector		
			(For Metal Moulding Fittings)		
	599	20	5	1	6.70

600			Bender		
			For Nos. 200-500-700		
	Cat. No.	Std. Pkg.	Unit Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
	600	1	..	2½	*$6.70
610			Mitre Box		
	610	1	..	3¾	*11.00
611			Mitre Box Guide Fingers		
	611	8	2	½	92.00
615			Wire Pulley		
	615	1	..	¼	*2.00
			Canopy Cutter		
	657	1	..	4	*40.00
657			WE Wiremold Enamel		
			1 pint can.....		137.20

*List price each.

WIREMOLD RACEWAY AND FITTINGS

No. 700 WIREMOLD RACEWAY



WIRE CAPACITY

Single Conductor: Type R or RH-2 No. 8; 3 No. 10; 4 No. 12; 5 No. 14; 10 No. 16; 10 No. 18. Type T or RU—3 No. 8; 6 No. 10; 8 No. 12; 8 No. 14; 16 No. 16; 18 No. 18.

.040-inch steel, standard Wiremold finish. Furnished in 10-ft. lengths with coupling. Packed 100 feet to carton. Weight per 1000 feet, 360 pounds.

No. **700** Wiremold .....per foot **$0.178**

No. **5700-F** Flexible Section (18-in.) per 100 ..... **218.00**

No. 5700 AND 700 WIREMOLD FITTINGS

Fittings having catalog numbers beginning with 57 are for use with 500 and 700 Wiremold.

Installation Fittings	Cat. No.	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std.Pkg.	Price Per 100
5701			**Coupling**		
	5701	200	50	3¾	**$3.00**
702			**Bushing**		
	702	200	50	¾	**3.90**
5703			**Supporting Clip**		
	5703	500	50	12¾	**3.90**
704			**One or Two Hole Strap**		
	704	200	50	6¼	**3.90**
706			**Connection Cover**		
	706	200	50	2	**2.40**
5708			**Fixture Hook**		
	5708	20	5	1½	**34.40**
5709			**Ground Clamp**		
	5709	20	5	3⅝	**16.00**
711			**90° Flat Elbow**		
	711	100	5	16½	**27.50**
5711 LH			**Internal Twisted Elbows** (For 90° Twist with 90° Turn)		
	5711-LH	50	5	9½	**60.30**
	Legs 2½ inches long.				
5711 RH	**5711-RH**	50	5	9½	**60.30**
	Legs 2½ inches long.				
712			**45° Flat Elbow**		
	712	20	5	1¾	**34.10**
	Legs 1 inch long.				
715			**Tee**		
	715	50	5	9½	**46.80**
	3¾"L.—2"W.—1"D.				
717			**Adjustable Internal Elbow**		
	717	100	5	21	**34.40**
	Legs 2⅛ inches long. One leg scored.				
5717 A			**Internal Pull Elbow**		
	5717-A	10	1	4¼	**92.30**
	Legs 5½ inches long.				
718			**Adjustable External Elbow**		
	718	100	5	16	**28.10**
	Legs 2⅛ inches long. One leg scored.				

WIREMOLD RACEWAY AND FITTINGS

No. 5700 AND 700 WIREMOLD FITTINGS

Installation Fittings	Cat. No.	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std.Pkg.	Price Per 100
5719			**Corner Box**		
	5719	20	5	8¼	**$92.50**
	2½"L.—2⅜"W.—2½"D.				
5719 A			**Corner Box**		
	5719-A	20	5	5½	**73.70**
	3⅜"L.—1¾"W.—1⅛"D.				
5720			**Narrow Outlet Boxes** No. 5720 with ½-inch Male Nipple		
	5720	10	1	2½	**88.00**
	3¾"L.—⅞"W.—1"D.				
5720 A	**5720-A**	20	5	4¾	**101.40**
	3¾"L.—⅞"W.—1"D.				
	With ⅜-inch Male Nipple				
5720 B	**5720-B**	50	5	10	**88.00**
	3¾"L.—⅞"W.—1"D.				
5721			**Utility Box**		
	5721	40	5	13¼	**70.30**
	3" dia., 1¼" deep.				
5725			**Receptacle Base** 660W., 250V.		
	5725	20	5	8½	**147.60**
	3" dia., 1¼" deep.				
5726			**Keyless Receptacle** 660W., 250V.		
	5726	20	5	8½	**110.80**
	3" dia., 1¾" deep.				
5727			**Plug Receptacle** 15A., 125V.; 10A., 250V.		
	5727	40	5	16	**150.30**
	3" dia., 1¼" deep.				
5727 G			**Receptacle** 2-Wire, 3-Pole with Ground		
	5727-G	10	1	5¼	**332.00**
5727 P			**Receptacle** 3-Wire, Polarized without Ground		
	5727-P	10	1	5½	**332.00**
5727 R			**Radio Receptacle**		
	5727-R	10	1	4½	**270.00**
	15 A., 125V.; 10A., 250V.				
5728			**Utility Box**		
	5728	20	1	8	**80.00**
	4¼"L.—1⅝"W.—1$\frac{3}{32}$"D.				
5728 B			**S.P. Switch with Box** 10A., 125V.; 5A., 250V.		
	5728-B	10	1	4¾	**177.00**
	4¼"L.—1⅝"W.—1$\frac{3}{32}$"D.				
5730			**Connector Block***		
	5730	20	5	1	**36.90**
5730 A			**Connector Block†**		
	5730-A	8	2	½	**73.70**
5731			**Blank Cover‡**		
	5731	50	5	3¾	**21.70**
	2⅜" dia., ¼" deep.				

*660W., 250V. For use with 5721, 5732, and 5733.

†660W., 250V. For use with 5720, 5720A, 5720B, and 5728.

‡For use with 5732 and 5733.

WIREMOLD RACEWAY AND FITTINGS

No. 5700 AND 700 WIREMOLD FITTINGS

Installation Fittings	Cat. No.	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std.Pkg.	Price Per 100
5732	**Outlet Box**				
	5732	20	5	3½	$73.70
	2½" dia., 1" deep.				
5733	**Outlet Box**				
	5733	20	5	6	83.30
	3" dia., 1" deep.				
5734	**Blank Extension Box**				
	5734	20	5	13⅛	120.00
	4¾" dia., 1 5/16" deep.				
5734 A	**Utility Box**				
	5734-A	20	5	13½	126.30
	4¾" dia., 1 5/16" deep.				
5735	**Distribution Box**				
	5735	20	1	17½	163.50
	4¾"L.—4¾"W.—1⅜"D.				
5736	**Blank Cover**				
	5736	100	5	19½	33.80
	4 5/16" dia., 1/8" deep. For Nos. 5735-5737A-38A-39-39A, 1035-39.				
5737 A	**Extension Box**				
	5737-A	60	5	44½	124.30
	5½" dia., 1" deep.				
5738 A	**Fixture Box**				
	5738-A	60	5	49¾	108.00
	5½" dia., 1" deep.				
5738F	**Grounding Box**				
	5738-F	20	5	13	84.70
	For Fluorescent Fixtures. 8"L.—3⅛"W.—⅞"D.				
5739	**Fixture Box**				
	5739	40	5	43½	123.00
	6⅜" dia., 1" deep.				
5739 A	**Extension Box**				
	5739-A	40	5	41½	141.00
	6⅜" dia., 1" deep.				
5740	**S.P. Switch with Box** 10A., 125V.; 5A., 250V.				
	5740	40	1	21	189.40
	4 5/16"L.—2½"W.—1⅛"D.				
5741	**Switch and Receptacle Box**				
	5741	20	1	12½	114.40
	4⅝"L.—2⅞"W.—1⅜"D.				
5742	**Junction Box**				
	5742	20	1	8	104.80
	4 5/16"L.—2½"W.—1⅛"D.				
5742 A	**Adjustable Junction Box**				
	5742-A	20	5	8¼	145.00
	4 5/16"L.—2½"W.—1⅛"D.				
5743	**Duplex Receptacle and Box** 15A., 125V.; 10A., 250V.				
	5743	40	1	22	148.60
	4 5/16"L.—2½"W.—1⅛"D.				
	Switch and Receptacle Boxes				
	5744‡	20	1	19½	179.50
	1 Gang—4⅝"L.—2⅞"W.—2¾"D.				
	5744-2‡	10	1	12½	304.00
	2 Gang—4⅝"L.—4¾"W.—2¾"D.				
	5744-3‡	10	1	15¾	359.70
	3 Gang—4⅝"L.—6½"W.—2¾"D.				
5744	5744S	20	1	16	150.90
	1 Gang—4⅝"L.—2⅞"W.—2¼"D.				
	5744S-2	10	1	11	255.00
	2 Gang—4⅝"L.—4¾"W.—2¼"D.				
	5744S-3*	10	1	12	302.40
	3 Gang—4⅝"L.—6½"W.—2¼"D.				

‡Extra Deep Switch Box and Receptacle.
*Furnished up to 12-gang on special order.

WIREMOLD RACEWAY AND FITTINGS

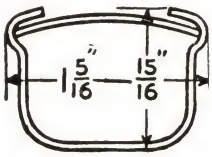
No. 5700 AND 700 WIREMOLD FITTINGS

Installation Fittings	Cat. No.	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std.Pkg.	Price Per 100
5745	**Comb. Switch and Recept. Box**				
	5745	40	1	27	$119.00
	4⅝"L.—2⅞"W.—1¾"D.				
5747	**Shallow Switch and Receptacle Boxes**				
	5747	40	1	23	95.20
	1 Gang—4⅝"L.—2⅞"W.—1⅜"D.				
	5747-2	10	1	8½	234.90
	2 Gang—4⅝"L.—4¾"W.—1⅜"D.				
	5747-3	10	1	10¼	280.00
	3 Gang—4⅝"L.—6½"W.—1⅜"D.				
5748	5748‡	40	1	27	106.00
	1 Gang—4⅝"L.—2⅞"W.—1¾"D.				
	5748-2	20	1	20	242.00
	2 Gang—4⅝"L.—4¾"W.—1¾"D.				
	5748-3	10	1	12¼	304.50
	3 Gang—4⅝"L.—6½"W.—1¾"D.				
5748 S	**Shallow Receptacle Box**				
	5748-S	40	1	19½	92.20
	4⅝"L.—2⅞"W.—1 1/16"D.				
5749	**Switch and Receptacle Box**				
	5749	10	1	5½	194.00
	4⅝"L.—2⅞"W.—2 5/16"D.				
5751 5752 5753	**Flush Type Extension Adapters**				
	5751	40	1	17	95.20
	1 Gang—4⅝"L.—2⅞"W.—1 1/16"D.				
	5752	10	1	6	265.00
	2 Gang—4⅝"L.—4¾"W.—1 1/16"D.				
	5753	10	1	7½	318.00
	3 Gang—4⅝"L.—6½"W.—1 1/16"D.				
5760	**Blank Extension Box**				
	5760	10	1	5	123.20
	4⅝"L.—2⅞"W.—1 1/16"D.				
5780	**Special Nipple**				
	5780	20	5	1	26.00
	(With ½" locknut.) ⅜" internal thread, ½" external thread.				
5781 5781 A	**Box Connectors**				
	5781	100	5	5½	36.50
	½-inch male.)				
	5781-A	20	5	2⅛	59.60
	(¾-inch male.)				
5782 5782 A	**Conduit Connectors**				
	5782	50	5	4½	41.80
	(½-inch female.)				
	5782-A	20	5	2¾	64.60
	(¾-inch female.)				
5783	**Elbow Box Connector**				
	5783	20	5	2½	67.10
	2⅛"L.—1¼"W. (½" male).				
5784	**Elbow Conduit Coupling**				
	5784	10	1	2	67.10
	2⅛"L.—1¼"W. (½" female).				
5785	**Combination Connector**				
	5785	50	5	7⅛	36.50
	2½"L.—1⅜"W.—1 5/16"D.				
5786	**Adjustable Offset Connector**				
	5786	20	5	5½	96.50
	2⅜"L.—1⅝"W.—2 1/16"D.				
5787	**Kick Plate**				
	5787	10	1	3¾	70.40
	3"L.—1⅝"W.—1⅝"D.				
5788	**Open Work Coupling**				
	5788	20	5	4¾	65.30
	3"L.—2¼"W.—¾"D.				
5790	**Armored Cable Connectors**				
	5790	50	5	2	20.20
	(Use on special approval only.)				
5790 A	5790-A	50	5	3	18.50

‡Switch and Receptacle Box.

WIREMOLD RACEWAY AND FITTINGS

No. 1000 WIREMOLD RACEWAY



WIRE CAPACITY

Single Conductor: Type R or RH—4 No. 6; 5 No. 8; 6 No. 10; 10 No. 12; 10 No. 14; 24 No. 16; 24 No. 18. Type T or RU—5 No. 6; 8 No. 8; 8 No. 10; 10 No. 12; 10 No. 14; 40 No. 16; 50 No. 18.

.040-inch steel, standard Wiremold finish. Furnished in 10-foot lengths with coupling. Packed 100 feet to carton.

Weight per 100 feet, 64 pounds.

No. **1000** Wiremold Raceway .....per ft. **$0.408**
No. **1000-F** Flexible Section (18") per 100 **248.20**

No. 1000 WIREMOLD FITTINGS

Installation Fittings	Cat. No.	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std.Pkg.	Price Per 100
1001			Coupling		
	1001	100	10	6¾	$9.20
1002			Bushing		
	1002	40	10	1	7.60
1003			Supporting Clip		
	1003	100	10	4¼	7.60
1004			Two Hole Strap		
	1004	100	10	5	14.30
1005			One Hole Strap		
	1005	100	10	3½	14.30
1009			Ground Clamp		
	1009	4	1	½	31.90
1011			90° Flat Elbow		
	1011	10	1	7	78.00
	Each leg 4½" long.				
1011 LH			Internal Twisted Elbow		
	1011-LH	4	1	2½	140.00
	(For 90° Twist with 90°Turn) One leg 2⅛" long—one leg 3¼" long.				
1011 RH			Internal Twisted Elbow		
	1011-RH	4	1	2½	140.00
	(For 90° Twist with 90° Turn) One leg 2⅛" long—one leg 3¼" long.				
1013			Adjustable Flat Elbow		
	1013	4	1	2½	96.40
	Each leg 2⅝ inches long. For bends from 56° to 128°.				
1017			Internal Elbow		
	1017	6	1	5	110.80
	One leg 4¼"—one leg 5¼" long.				
1018			External Elbow		
	1018	4	1	1	71.30
	Each leg is 2½ inches long.				
1028			Utility Box		
	1028	10	1	9¼	140.80
	4⅝"L.—2⅞"W.—1⅜"D.				
1035			Distribution Box		
	1035	6	1	13	228.80
	6⅜"L.—6⅜"W.—1⅞"D.				
1039			Fixture Box		
	1039	10	1	13	187.00
	6⅜" dia., 1⅛" deep.				

WIREMOLD RACEWAY AND FITTINGS

No. 1000 WIREMOLD FITTINGS

Installation Fittings	Cat. No.	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std.Pkg.	Price Per 100
1048			Switch and Recept. Box		
	1048	10	1	9	$212.00
	4⅝"L.—2⅞"W.—1¾"D.				
1082			Conduit Connector		
	1082	10	1	4	115.00
	1" female.				
1085			Combination Connector		
	1085	10	1	4⅛	59.50
	3⅞"L.—2⅛"W.—2"D.				
1086			Adjustable Offset Connector		
	1086	4	1	3	145.00
	3⅛"L.—2⅛"W.—3½"D.				
1087			Kick Plate		
	1087	10	1	5½	77.00
1089			Reducing Connector		
	1089	20	5	2¾	27.70
	From 1000 Twistout to 500 or 700 Wiremold.				

No. 1100 WIREMOLD LIGHTING STRIP

Wiremold finish. Furnished in 10-foot lengths. 100 feet per carton. Weight per 100 feet, 44 lbs. 1⅛ inches wide, 1$\frac{3}{32}$ inches deep.

No. **1100B** Channel.....per ft. **$0.263**

No. 1100 WIREMOLD FITTINGS

	Cat. No.	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std.Pkg.	Price Per 100
1101			Coupling		
	1101	20	5	3¾	$43.70
1101A			Inside Coupling		
	1101A	5	1	1	15.20
1104			Two Hole Strap		
	1104	20	5	1¾	14.30
1108			Adjustable Hanger Assembly		
	1108	10	1	8⅛	203.00
1108A			Hanger Clamp		
	1108A	20	5	1½	42.00
1108B			Bracket Hanger		
	1108B	2	1	2½	101.40
1110			End Fitting		
	1110	20	5	1¼	35.20
1110A			Conduit Connector		
	1110A	20	5	2½	61.20
1110B			Blank End Fitting		
	1110B	20	5	½	21.70
1113			Adjustable Flat Elbow		
	1113	4	1	2½	110.80
1114			Turnover Connector		
	1114	2	1	¾	51.90

WIREMOLD RACEWAY AND FITTINGS

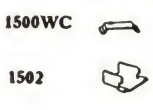
No. 1100 WIREMOLD FITTINGS

Installation Fittings	Cat. No.	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std.Pkg.	Price Per 100
1114A	Combination Connector (½" KO)				
	1114A	5	1	1¾	$51.90
1115	Tee (½" KO)				
	1115	4	1	2	68.80
1117	Internal Elbow				
	1117	4	1	1¾	81.30
1118	External Elbow				
	1118	4	1	1½	99.70
1123	Takeoff Fitting (⅜" Female)				
	1123	20	5	2¼	73.70
1123A	Takeoff Fitting (⅜" Male)				
	1123A	20	5	1¾	73.70
1124	Takeoff Fitting (½" Female)				
	1124	20	5	2¾	77.10
1126	Keyless Socket				
	1126 (660W250V)	20	1	6¾	99.90
1126A	Bayonet Reflector Socket				
	1126A (660W250V)	20	1	8	107.30
1126B	Angle Socket				
	1126B (660W250V)	10	1	7⅛	184.50
1127	Plug Receptacle				
	1127 (15A125V, 10A125V)	20	1	2	70.40
1128	Utility Box				
	1128	10	1	5¼	166.00
1173	Adjustable Offset Connector				
	1173 (1100 to 1500)	10	1	2½	67.00
1174	Takeoff Connector				
	1174 (1100 to 500 or 700)	10	1	2⅛	58.70
1181A	End Connector (¾" Male)				
	1181A	20	5	2½	73.70
1182B	Conduit Connector (1" Female)				
	1182B	20	5	4	92.00

No. 1500 PANCAKE WIREMOLD OVERFLOOR RACEWAY

Furnished in 10-foot lengths without couplings. 100 feet to carton. Weight per 100 feet, 50 lbs. Price, No. **1500** Pancake Wiremold....per ft. **$0.378**

No. 1500 PANCAKE RACEWAY FITTINGS

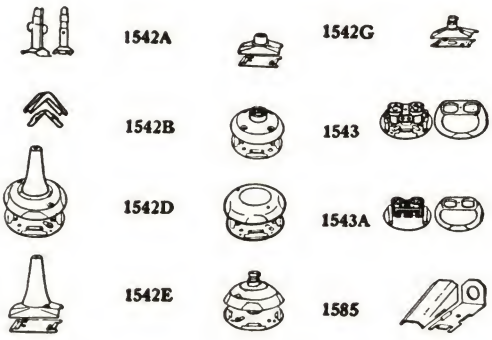




Cat. No.	Fittings	Std. Pkg.	Unit Pkg.	Std. Pkg. Wt.	Price Per 100
1500WC	Wire Clip	200	20	½	$1.40
1502	Bushing	40	10	½	8.00
1504	Two-hole Strap (Each leg 2½ inches.)	50	10	4¼	13.20
1511	90° Flat Elbow	20	1	4	36.90
1517	Internal Elbow	20	5	4¾	36.90

WIREMOLD RACEWAY AND FITTINGS

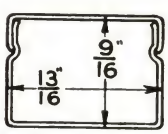
No. 1500 PANCAKE WIREMOLD FITTINGS



Cat. No.	Fittings	Std. Pkg.	Unit Pkg.	Pkg. Wt.	Price Per 100
1517A	Adapter Fittings (With fibre bushing.)	20	5	4	$51.80
1518	External Elbow (Each leg 2½ inches.)	20	1	5	44.00
1524	Telephone Outlet (4 inches diameter, 3 3/32 inches high.)	20	1	11½	180.00
1524A	Narrow Telephone Outlet (3¼" L., 1 11/32" W., 3 5/8" H.)	20	1	8	147.60
1542A	Narrow Junction Box (½" Female Bushing) (3¼" L., 1 11/32" W., 1 7/16" Overall.)	20	5	5	62.90
1542B	Base for Floor Receptacle (having ¾" Stem) (For Standard Floor Receptacle having ¾" Stem.)	10	1	9½	468.00
1542D	Junction Box Deep Type	20	5	7½	73.70
1542E	*Junction Box Deep Type ⅜" Connector ⅜" Bushing	20	1	7½	92.30
1542G	Narrow Junction Box with ⅜" Connector (½" Female Bushing)	20	5	5	104.00
1543	Duplex Receptacle (15 Amp., 125 Volt—10 Amp., 250 Volt. 4 inches dia., 1½ inches deep.)	20	1	14	184.50
1543A	Polarized Duplex Receptacle (3 Wire, 15 Amp., 125 Volt—10 Amp., 250 Volt. 4 inches dia., 1½ inches deep.)	10	1	7½	516.00
1585	Combination Connector (3¾" L., 1 11/32" W., 1¾" D.)	20	5	5	44.00

*For telephone use.

No. 1900 PLUGMOLD



WIRE CAPACITY

Single Conductor: Type R, RH, T, or RU with receptacles—3 No. 12; 3 No. 14. Type R, RH, T, or RU without receptacles—3 No. 12; 3 No. 14; 10 No. 16; 10 No. 18.

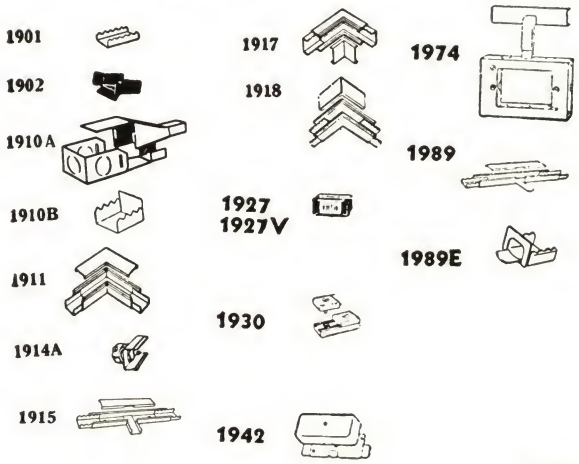
Has supporting screw knockouts at approximately 8-inch centers.

Base and cover of .025-inch steel, standard Wiremold finish. Furnished in 5-ft. lengths without couplings. Packed 100 ft. to carton. Weight per 100 ft.; Channel, 19 lbs.; cover, 12 lbs.

No. **1900B** Channel .....per ft. **$0.117**
No. **1900C** Cover .....per ft. **.087**

WIREMOLD RACEWAY AND FITTINGS

No. 1900 PLUGMOLD FITTINGS



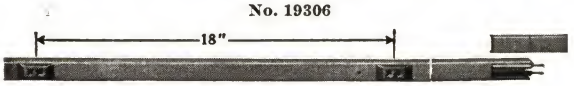
Cat. No.	Fittings	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std.Pkg.	Price Per 100
1901	Coupling, 1½" long..	50	5	1	$6.10
1902	Fibre Bushing	200	50	½	3.30
1910A	End Fitting	20	5	3½	29.40
1910B	Blank End, ¾" long..	20	5	¾	13.30
1911	90° Flat Elbow.....	10	1	3	49.30
	Base each leg 3¼" long. Cover each leg 2" long.				
1914A	Connector	20	2	5¾	49.30
	4" long has Connector for armored cable or non-metallic sheathed cable.				
1914C	Wall Box Connector	8	2	3¼	78.00
1915	Tee	30	3	10	51.90
	Base 6" long, cover 4" long.				
1917	Internal Elbow	20	1	3	56.70
	Base 1 leg 2⅛", 1 leg 3⅛" L. Cover, legs 1" L.				
1918	External Elbow	10	1	1¾	51.90
	Base 1 leg 2⅛", 1 leg 3¼" L. Cover, legs 1½" L.				
1927	Receptacle (brown)	50	5	2¾	62.20
1927V	Receptacle (ivory) ..	50	5	2¾	77.10
1930	Connector Block	20	5	1¼	41.60
1942	Junction Box	20	1	3¼	63.80
1974	Take-off Connector ..	4	1	½	134.20
1989	Reducing Connector (1900 to 500)	5	1	2	70.10
1989A	Reducing Connector (1900 to 200)	5	1	2	70.10
1989E	Reducing Connector (End of 1900 to 200)	20	5	¾	24.20
200–19	Take-off Kit*	5	1	5	242.00

*Consists of one No. 251 Extension Adapter, a 15-inch length of No. 200 Wiremold, a No. 1989A Reducing Connector, and Wiring Harness of No. 12 Type R Conductors. Everything necessary to extend from existing wall outlet to No. 1900.

No. 1900 WIRED PLUGMOLD



No. 19306



No. 19618

Cat. No.	Fittings	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std.Pkg.	Price Per 100
19306	3-Ft. Lgth., 6 Outlets, 6" on Centers.....	10	1	16	$543.00
19606	6-Ft. Lgth., 12 Outlets, 6" on Centers.....	10	1	26	1035.10
19618	6-Ft. Lgth., 4 Outlets, 18" on Centers.....	10	1	27	577.50

WIREMOLD RACEWAY AND FITTINGS

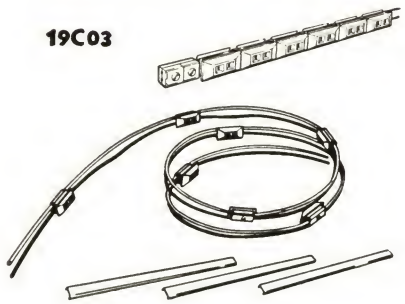
No. 1900T PLUGTRIM



Packed 100 feet per carton; weight per 100 feet 10 lbs. (5 ft. lengths). List per ft.....$0.126

Cat. No.	Fitting	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std.Pkg.	Price Per 100
1903T	Mounting Clip	100	10	1	$ 5.70
1917T	Internal Elbow	20	5	¾	20.30

1900 SERIES SNAPICOIL



19C12-19C24-19C36

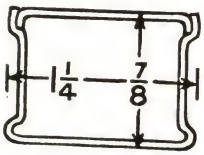
For use with standard No. 1900 channel, SNAPICOIL is a wiring harness consisting of No. 1927 Receptacle (brown or ivory) wired at the factory with two No. 12 Type R wires. Receptacles are listed and wire is labeled by Underwriters' Laboratories, Inc.

Cat. No.	Fitting	Wt. Lbs. Per Coil	Price Per Coil
*19C03	13-inch coil with 6 brown receptacles. One 1930 connector block furnished.....	1½	$5.40
*19C03V	Same as 19C03 except receptacles are ivory.....	1½	6.00
19C12	25-foot coil with 25 brown receptacles wired 12" on centers. 1900C cover sections furnished	6	24.90
19C12V	Same as 19C12 except receptacles are ivory.....	6	27.70
19C18	50-foot coil with 33 brown outlets wired 18" on centers. 1900C cover sections furnished	10	38.20
19C18V	Same as 19C18 but with ivory outlets	10	42.00
19C24	50-foot coil with 25 brown receptacles wired 24" on centers. 1900C cover sections furnished	10	30.60
19C24V	Same as 19C24 except receptacles are ivory.....	10	33.60
19C36	50-foot coil with 16 brown receptacles wired 36" on centers. 1900C cover sections furnished	10	23.90
19C36V	Same as 19C36 except receptacles are ivory.....	10	25.60

*Std. Pkg. 3; Unit Pkg. 1.

WIREMOLD RACEWAY AND FITTINGS

No. 2100 PLUGMOLD



WIRE CAPACITY

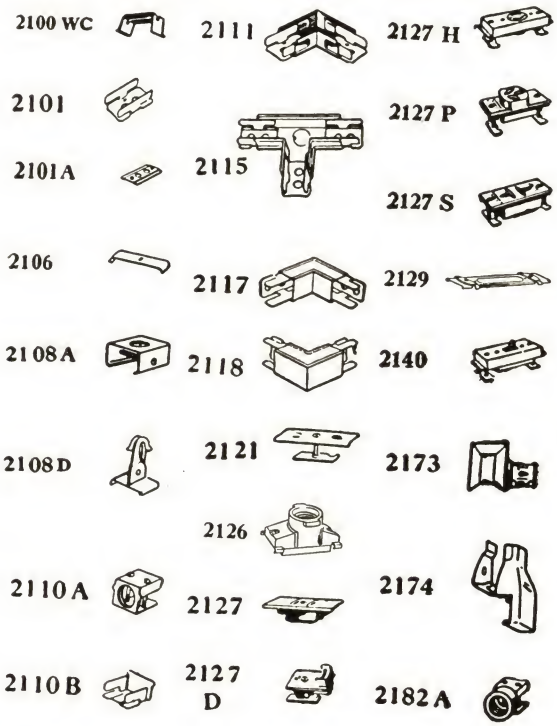
Single Conductor: Type R or RH—4 No. 6; 6 No. 8; 10 No. 10; 10 No. 12; 10 No. 14; 24 No. 16; 24 No. 18. With Devices in place—6 No. 12; 6 No. 14. Type T or RU—5 No. 6; 8 No. 8; 10 No. 10; 10 No. 12; 10 No. 14; 40 No. 16; 50 No. 18. With devices in place—6 No. 8; 8 No. 10; 10 No. 12; 10 No. 14.

No. 2100B Channel .040-inch steel, standard Wiremold finish. Furnished in 10-ft. lengths without couplings; packed 100 ft. to carton. Weight per 100 ft. 41 pounds.

No. 2100C Cover .040-inch steel, standard Wiremold finish. Furnished in lengths of 5 feet, scored every 3 inches. Packed 100 feet to carton. Weight per 100 feet, 19 pounds.

No. **2100B** Channel .....per ft. **$0.224**
No. **2100C** Cover .....per ft. **.16**

No. 2100 PLUGMOLD FITTINGS



Cat. No.	Fittings	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std. Pkg.	Price Per 100
2100WC	Wire Clip	200	20	2	$3.60
2101	Coupling	20	5	2	8.00
2101A	Rigid Coupling	20	5	1	16.70
2106	Cover Clip	100	20	¼	4.00
2108A	Hanger Clamp	20	5	2	40.00
2108D	Fixture Hook	20	5	2	30.30
2110A	End Connector ..... (½" Locknut)	20	5	3	34.40
2110B	Blank End Fitting..	20	5	2	17.50
2111	90° Flat Elbow.....	20	5	5	51.80
2115	Tee	4	1	1¾	129.20
2117	Internal Elbow*	20	5	5	53.60
2118	External Elbow* ..	20	5	5	59.50
2121	Telephone Outlet ..	20	5	1½	31.00
2126	Keyless Socket ..... 660W, 250V.	20	1	7	99.90

*(With cover).

WIREMOLD RACEWAY AND FITTINGS

No. 2100 PLUGMOLD FITTINGS

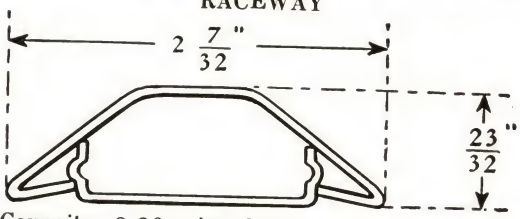
Cat. No.	Fittings	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std. Pkg.	Price Per 100
2127	Plug Receptacle .... (Brown) 15A, 125V; 10A, 250V.	40	1	4	$70.40
2127V	Plug Receptacle .... (Ivory) 15A, 125V; 10A, 250V.	40	1	4	95.60
2127D	Lumiline Recept. .. Single, 660W, 250V.	20	2	1	73.70
2127H	Midget Twist-Lock Receptacle 2-wire (Brown) ..	20	1	4	185.90
2127P	3-W, Polarized Receptacle (Brown) ..... 15A, 125V; 10A, 250V.	20	1	3	132.40
2127S	T-Slot Receptacle (Brown) ..... 15A, 125V; 10A, 250V.	40	1	4¾	78.00
2129	Adapter (Conduit Type)	10	1	¾	32.00
2140	Single Pole Switch with Box ..... 10A, 125V; 5A, 250V.	20	1	6	161.00
2173	Offset Connector .. (2100 to 1500)	10	1	1¼	44.30
2174	Takeoff Connector (2100 to 500 or 700)	10	1	2	58.80
2182A	End Fitting, ¾-in. Female Bushing	20	5	3½	92.30

No. 2100 COVERS For Lumiline Lamp



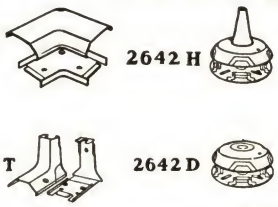
Cat. No.	Fitting	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std. Pkg.	Price Per 100
21211	For 12-inch Lumiline Lamp	10	1	2¼	$20.00
21212	For 18-inch Lumiline Lamp	10	1	3½	31.90

No. 2600 WIREMOLD PANCAKE OVERFLOOR RACEWAY



Capacity: 2 26-pair telephone cables.
Cover, .050-inch steel; Base, .040-inch steel, galvanized. Furnished in 10-foot lengths, without couplings, 50 feet to carton; weight 46 lbs.
Price, No. **2600** Pancake Raceway....per ft. **$0.553**

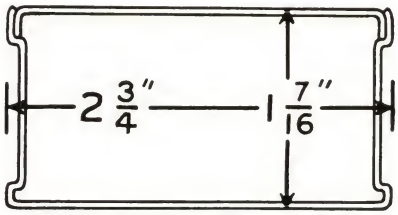
No. 2600 PANCAKE FITTINGS



Cat. No.	Fittings	Std. Pkg.	Unit Pkg.	Wt.Lbs. Std. Pkg.	Price Per 100
2611	90° Flat Elbow.....	5	1	1¾	$167.80
2617T	Telephone Elbow ..	20	2	7	139.20
2642D	Junction Box	10	1	5½	147.60
2642H	Junction Box (with 3" Rubber Stem)	8	1	5¼	218.00

WIREMOLD RACEWAY AND FITTINGS

No. 3000 WIREMOLD RACEWAY



WIRE CAPACITY, TYPES R OR RH, TYPES T OR RU

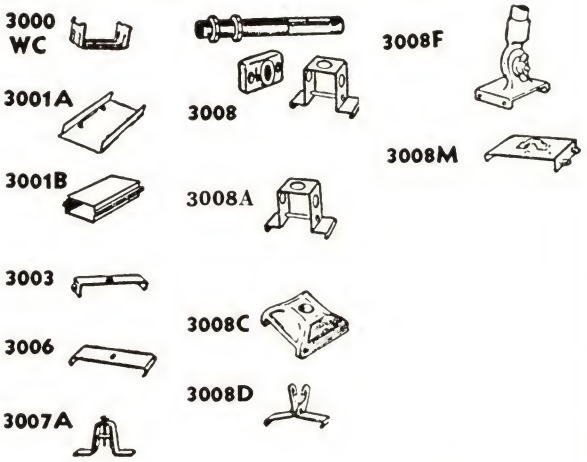
Single Conductor: Type R or RH—8 No. 6; 10 No. 8; 10 No. 10; 10 No. 12; 10 No. 14; 100 No. 16; 100 No. 18. With receptacles or devices in place, 6 No. 6; 8 No. 8; 10 No. 10; 10 No. 12; 10 No. 14. Type T or RU—8 No. 6; 10 No. 8; 10 No. 10; 10 No. 12; 10 No. 14; 100 No. 16; 100 No. 18. With receptacles or devices in place—8 No. 6; 10 No. 8; 10 No. 10; 10 No. 12; 10 No. 14.

.040-inch steel, standard Wiremold or white finish. Furnished in 8-foot lengths without couplings, 80 feet to carton. Weight per 80 feet: channel, 64 lbs.; cover, 32 lbs.

Has ½ and ¾-inch entrance knockouts approximately 8-inch centers. Has supporting screw knockouts approximately 8-inch centers.

No. **3000-B** Channel .....per foot **$0.437**
No. **3000-C** Cover .....per foot **.224**

No. 3000 WIREMOLD FITTINGS

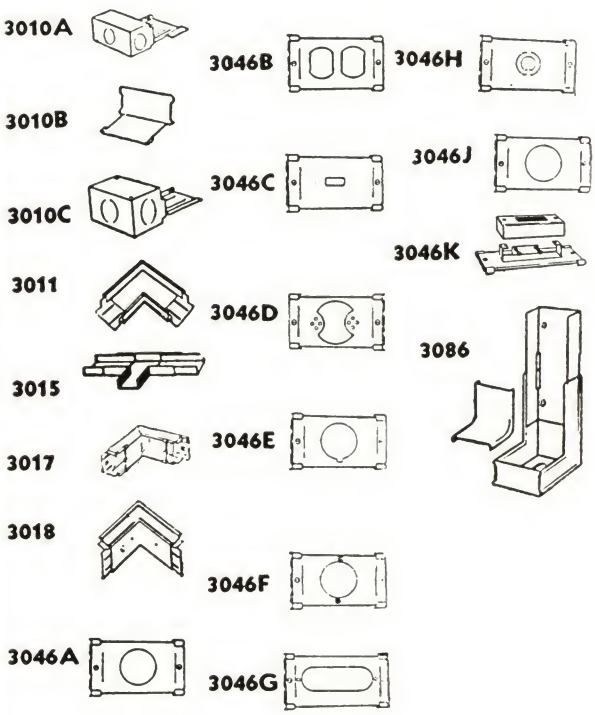


Cat. No.	Fittings	Std. Pkg.	Unit Pkg.	Std. Pkg. Wt.	Price Per 100
*3000WC	Wire Clip	40	1	2	$ 5.00
*3001A	Rigid Inside Coupling	10	2	4	20.00
3001B	Rigid Outside Coupling	8	2	9	83.80
3003	Supporting Clip	50	5	2½	16.70
3006	Cover Clip	40	10	1½	3.30
*3007A	Mounting Strap for Wiring Devices	80	2	8	8.50
3008	Hanger Assembly (With ⅜" Pipe Nipple)	10	1	8	211.40
3008A	Hanger Clamp	10	1	2	43.70
3008C	Hanger Casting (Tapped for ½" Conduit)	4	1	7½	150.90
3008D	Loop Hanger	20	2	1¾	30.30
3008F	Adjust. Ratchet Hanger (Tapped for ½" Conduit)	5	1	6	226.40
3008M	Messenger Cable Hanger	10	5	1¾	106.70

*Unpainted.

WIREMOLD RACEWAY AND FITTINGS

No. 3000 WIREMOLD FITTINGS (Continued)



Cat. No.	Fitting	Std. Pkg.	Unit Pkg.	Std. Pkg. Wt.	Price Per 100
3010A	End Fitting, ½" Knockout	20	1	4	$60.40
3010B	Blank End Fitting	20	5	2	22.90
3010C	End Fitting, 1" Knockout	4	1	1¾	90.50
3011	90° Flat Elbow	5	1	5	100.50
3015	Tee	5	1	10	167.80
3017	Internal Elbow	10	1	10	104.00
3018	External Elbow	5	1	3	100.70
3028	Utility Box	6	1	13	440.00
3046A	Single Receptacle Cover (For Devices Rated 15A 100V, 10A 250V)	10	1	2¾	46.20
3046B	Duplex Receptacle Cover	10	1	2¾	46.20
3046C	Tumbler Switch Cover	10	1	2¾	46.20
3046D	Surface Device Cover	10	1	2¾	46.20
3046E	Screw Type Sign Rec. Cover	10	1	2¾	46.20
3046F	Surface Type Sign Rec. Cover	10	1	2¾	46.20
3046G	Condulet Device Cover	10	1	2¾	46.20
3046H	Fixture and Drop Cord Cover	10	1	2¾	46.20
3046J	Single Receptacle Cover (For Devices Rated 20A 250V)	10	1	2¾	46.20
3046K	Circuit Breaker Cover	20	2	10½	242.00
3086	Adjustable Offset Connector	5	1	4¼	182.90

WIREMOLD FLUORESCENT STRIP AND FITTINGS

No. 3000 FLUORESCENT STRIP

White Finish



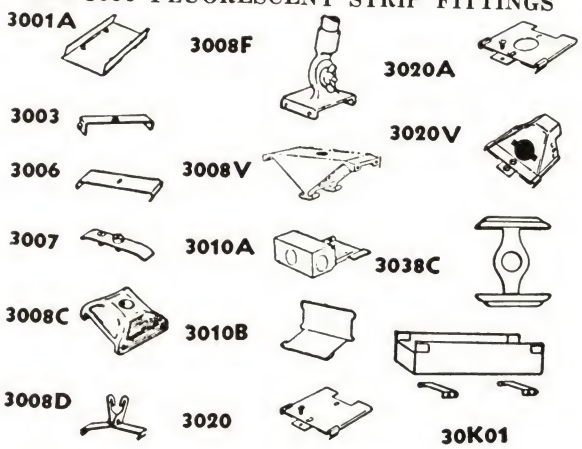
2¾ inches wide.

1⅞ inches deep.

3000B and 3000C furnished in 8-foot lengths.

		3000B Channel	3000C Cover
List price	per ft.	$ .55	$ .282
Weight per 80 ft.		65 lbs.	35 lbs.

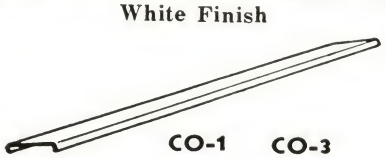
No. 3000 FLUORESCENT STRIP FITTINGS



Cat. No.	Fitting	Std. Pkg.	Unit Pkg.	Std. Pkg. Wt.	Price Per 100
*3001A	Rigid Inside Coupling	10	2	2	$20.00
3003	Supporting Clip	50	5	2½	20.20
3006	Cover Clip	40	10	1½	4.00
*3007	Auxiliary Clamp	20	2	1	15.60
3008C	Hanger Casting (Tapped for ½" Conduit)	4	1	7½	183.00
3008D	Loop Hanger	20	2	1¾	36.50
3008F	Adjustable Ratchet Hanger (Tapped for ½" Conduit)	5	1	6¼	274.40
3008V	90° Angle Hanger (Tapped for ⅜" Conduit)	1	....	¾	274.40
3010A	End Fitting, ½" K.O.	20	1	4	73.20
3010B	Blank End Fitting	20	5	2	27.50
3020	Lampholder Clamp	20	2	2½	44.40
3020A	Lampholder and Starter Base Clamp	20	2	3½	48.20
3020V	Lampholder Clamp (Double)	10	2	1¼	146.40
3038C	Outlet Box Adapter	4	1	1½	146.40
30K01	Ballast Housing Box (For Large Cross Section Tu-Lamp Ballast for 2-30W or 2-40W Lamps)	1	....	2½	365.90

No. 3000C COVER CUT TO LAMP LENGTH

White Finish



CO-1 **CO-3**
CO-2 **CO-4**

Cat. No.	Description	Std. Pkg.	Unit Pkg.	Std. Pkg. Wt.	Price Per 100
CO-1	For 18-inch Lamp....	10	1	7	$51.20
CO-2	For 24-inch Lamp....	10	1	9	69.60
CO-3	For 36-inch Lamp....	10	1	14	98.80
CO-4	For 48-inch Lamp....	10	1	18	131.60

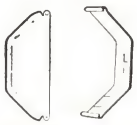
*Unpainted.

WIREMOLD FLUORESCENT STRIP FITTINGS

REFLECTORS AND REFLECTOR PARTS



3092
3095



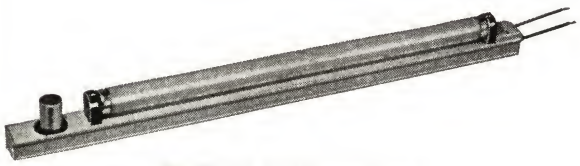
3092-E **3092-S**

Length Inches	Std. Pkg.	Unit Pkg.	Specular *Ox-al-ite Cat. No.	Specular *Ox-al-ite Price Per 100	White Finish Cat. No.	White Finish Price Per 100
18	10	1	3092-18	$384.00	3095-18	$310.80
24	10	1	3092-24	497.50	3095-24	384.00
36	10	1	3092-36	669.60	3095-36	567.10
48	10	1	3092-48	1035.60	3095-48	731.80
End Cap	20	5	3092-E	84.00	.....	.....
Stop Gap	20	5	3092-S	31.10	.....	.....

*Reg. U.S. Pat. Off. Finished in Alzak Process (Alzak is a Registered Trademark of The Aluminum Company of America).

WIREMOLD No. 21A SERIES FLUORESCENT UNITS

15 Watt—White Finish



No. 21A-10, 21¼ Inches Long

Wiremold No. 21K25C control located in channel. 110-125 V., 60 cycle, Low Power Factor. Lamps not included. (Also available for operation on 110-125 V., 50 cycle. Prices on request.)

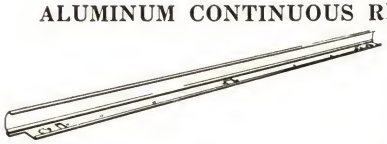
Cat. No.	Overall Length Inches	Std. Pkg.	Unit Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
	Combination Push Button Switch and Starter, 6 ft. cord and plug in ⅛-inch fiber Bushing No. 2110B Special. For one 15-watt T-8 lamp.				
21A-6	21	10	1	25½	$9.40
	FS-2 Starter. 6 ft. cord and plug in ⅛-inch bushing in No. 2110B Special. For one 15-watt T-8 lamp.				
21A-9	20	10	1	25	9.80
	FS-2 Starter. 3-inch leads in No. 2110A at end. For one 15-watt T-8 lamp.				
21A-10	21¼	10	1	24¼	9.60
	FS-2 Starters. 3-inch leads in No. 2110A at end. For two 15-watt T-8 lamps.				
21A-11	41¼	10	1	45¾	19.70
	FS-2 Starters. 3-inch leads in No. 2110A at end. For three 15-watt T-8 lamps.				
21A-13	61¼	5	1	35½	29.30
	FS-2 Starters. 3-inch leads in No. 2110A at end. For four 15-watt T-8 lamps.				
21A-14	81¼	3	1	28½	39.50
	FS-2 Starters. 3-inch leads in No. 2110A at end. For five 15-watt T-8 lamps.				
21A-15	101¼	3	1	34	48.80

Two mounting clips furnished with 21A-6, 21A-9, 21A-10, 21A-11; three with 21A-13 and 21A-14; four with 21A-15.

WIREMOLD FLUORESCENT UNITS

No. 21A SERIES FLUORESCENT UNITS

15 Watt—White Finish
ALUMINUM CONTINUOUS REFLECTORS



21A-92



21A90-L 21A90-R

Cat. No.	Description	Std. Pkg.	Unit Pkg.	Std. Pkg. Wt.	Price Each
21A91	1 Lamp Reflector.....	10	5	2	$1.20
21A91A	1 Lamp Reflector for 21A-6	10	5	2	1.20
21A92	2 Lamp Reflector.....	10	5	3	2.20
21A93	3 Lamp Reflector.....	10	5	5	3.90
21A94	4 Lamp Reflector.....	10	5	6½	5.00
21A95	5 Lamp Reflector.....	10	5	8	6.40
21A90L	Reflector End Cap(L)	20	5	½	.60
21A90R	Reflector End Cap(R)	20	5	½	.60

No. 21AR SERIES FLUORESCENT SHOWCASE UNITS

15 Watt—Pearl Gray Finish
Reflecting Surface, White



No. 21AR-10

Complete with Pearl Gray continuous reflector. Wiremold No. 21K25C control located in channel. 110-125 volt, 60 cycle, Low Power Factor Lamps not included. (Also available for operation on 110-125 volt, 50 cycle. Prices on application.)

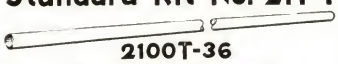
Cat. No.	Overall Length	Lamps No.	Lamps Size	Std. Pkg.	Pkg. Wt.	Price Each
With FS-2 Starters—3-Inch Leads in No. 2110A at One End						
21AR-10	21¼″	1	15WT-8	10	28½	$12.10
21AR-11	41¼″	2	15WT-8	10	56½	24.20
21AR-13	61¼″	3	15WT-8	3	26¼	36.20
21AR-14	81¼″	4	15WT-8	3	35	49.90
21AR-15	101¼″	5	15WT-8	3	42¾	59.60

Two mounting clips furnished with 21AR-10 and 21AR-11; three with 21AR-13 and 21AR-14; four with 21AR-15.

DOWN-TUBING KIT

Pearl Gray Finish

Standard Kit No. 21T-1



2100T-36
2 Lengths Furnished



2108T



2109T



2111T



2110TA

Additional Fittings for Installation Variations



2110T



2111T

For down feeding, remove No. 2110A End Fitting with which all 21A (and 21AR) Fluorescent Units are equipped and, depending on installation, substitute either No. 2110T 90° Swivel Elbow End Connector, or the No. 2110TA Straight End Connector.

Cat. No.	Description	Unit Pkg.	Std. Pkg.	Pkg. Wt.	Price Per 100
21T–1	Down-Tubing Kit	1	6	10½	$ 6.20*
2110T	Swivel End Connector	5	20	3	99.00
2111T	90° Elbow	5	20	3	74.80

*Price per kit.

WIREMOLD No. 2100 FLUORESCENT FITTINGS

2103A 

2126SA 

2120 

2127FB 

2126S 

2127FS 

Cat. No.	Fitting	Std. Pkg.	Unit Pkg.	Std. Pkg. Wt.	Price Per 100
2103A	Clip—Straight	20	5	¾	$18.50
2120	Receptacle Clamp	20	10	1	15.20
2126S	Slimline Lampholder (Low Voltage End)	5	1	¾	217.10
2126SA	Slimline Lampholder (High Voltage End)	5	1	1	231.00
2127FB	Flourescent Receptacle ..... (Single)	8	2	½	46.20
2127FS	Flourescent Starter Switch Holder .... (For FS-2 or FS-4 Starter)	10	1	¾	73.70

REFLECTORS

Concentrating Type—Specular *Ox-al-ite



Cat. No.	For Lamp Length	For Lamp Type	Std. Pkg.	Wt. Lbs.	Price Per 100
2197-12	12″	Lumiline	10	1½	$166.10
2197-18	18″	Fluorescent or Lumiline	10	2	221.30
2197-36	36″	Fluorescent	10	4	405.90

Unit package, 5.

REFLECTOR PARTS



2197S



2197-3



2197-6



2197-9

Cat. No.	Fittings	Std. Pkg.	Unit Pkg.	Std. Pkg. Wt.	Price Per 100
2197S	Reflec. Stop Gap.....	20	5	¼	$18.50
2197–3	Reflec. Spacer, 3⅝″ Long	10	1	2	83.80
2197–6	Reflec. Spacer, 6″ L.	10	1	2½	117.40
2197–9	Reflec. Spacer, 9″ L.	10	1	3	150.90

*Reg. U.S. Pat. Office. Finished in ALZAK Process (ALZAK is a registered trademark of the Aluminum Company of America).

COVER

For Fluorescent Lamps



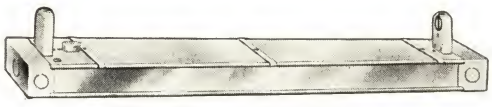
Cat. No.	Description	Std. Pkg.	Unit Pkg.	Std. Pkg. Wt.	Price Per 100
21213	For 18-inch Fluorescent Lamp	10	1	3¾	$50.40
21214	For 36-inch Fluorescent Lamp	10	1	7½	79.60

WIREMOLD FLUORESCENT UNITS

SINGLE LAMP—WIRED ASSEMBLIES

With Sockets, Control, and Starter Switch (Lamp not included)

110-125 Volts, 60 Cycle A.C.



With Entrance End Fittings

High Power Factor (90–100%) Recommended for General Use

Cat. No.	Lamp No.	Lamp Size	Overall Length	Wt. Lbs. Each	Price Each
With 2 No. 3010A Entrance End Fittings—½" K.O.					
1 H 11	1	18"–15 w	20½	5	**$14.40**
1 H 12	1	24"–20 w	26½	5½	**14.90**
1 H 13	1	36"–30 w	38½	8¾	**19.60**
1 H 14	1	48"–40 w	50½	10¼	**20.50**

Low Power Factor (55–60% lagging) Use When Auxiliary Power Factor Correcting Equipment is Used

With 2 No. 3010A Entrance End Fittings—½" K.O.					
1 L 11	1	18"–15 w	20½	3¾	**$ 9.10**
1 L 12	1	24"–20 w	26½	4	**9.50**
1 L 13	1	36"–30 w	38½	7¼	**14.40**
1 L 14	1	48"–40 w	50½	8¾	**15.10**

All wired units will be furnished for 110-125 volts, 60 cycle AC unless otherwise specified.

DESIGN 22 FLUORESCENT UNITS

White Finish



Wired and assembled. With lampholders, ballast, and starter switches. (Lamps not included.)

"V" Type Cover (2 Lamps), with 2 No. 3010V End Fittings. High Power Factor, 110-125 V. 60 Cycle A.C.

Cat. No.	For Lamps No.	For Lamps Size	Wt. Lbs. Each	Price Each
22H24	2	48–40W	14	**$25.60**

"V" Type Cover (4 Lamps), with 2 No. 3010V End Fittings. High Power Factor, 110-125 V. 60 Cycle A.C.

22H44	4	48–40W	28	**51.10**

THIS CATALOG DOES NOT CONTAIN EVERYTHING WE DISTRIBUTE — ADVISE US OF YOUR ADDITIONAL ELECTRICAL REQUIREMENTS

WIREMOLD FLUORESCENT UNITS

FLUORESCENT LINE-O-LAMPS—WIRED



All Line-O-Lamps furnished with two No. 3010B Blank End fittings. When specified, No. 3010A Entrance End fittings with ½-inch knockout may be obtained at **$0.73** list per end extra. This will extend channel 1¼ inches.

Wired Assemblies furnished with Controls (for 60 cycle AC only, high power factor), Sockets, and Starter Switches (lamps and reflectors not included).

110-125 Volts, 60 Cycle A.C.

Cat. No.	Lamps No.	Lamps Size	Overall Length, Feet	Price Each
20 H 24	2	48"–40 watt	8	**$30.20**
20 H 24X*	2	48"–40 watt	8	**30.20**

*Extension unit. Similar to 20H24 except that it is furnished with a No. 3001A Rigid Coupling and with 6" wire leads coming out of each end. No end fittings furnished.

SEMI-DIRECT FLUORESCENT UNITS

Wired and Assembled



Semi-Direct (1 Lamp). High Power Factor 110-125 Volt, 60 Cycle A.C.

Cat. No.	For Lamps No.	For Lamps Size	Overall Length	Wt. Lbs. Each	Price Each
25H12	1	24"–20w	25⅝"	9	**$23.90**
25H13	1	36"–30w	37⅝"	12½	**30.00**
25H14	1	48"–40w	49⅝"	14½	**33.40**
***25L14**	1	48"–40w	49⅝"	13¾	**28.80**

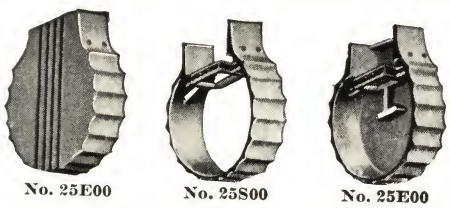
*Low Power Factor.

Semi-Direct (2 Lamps). High Power Factor 110-125 Volt, 60 Cycle

25H24	2	48"–40w	97⅝"	22½	**56.40**
***25H24X**	2	48"–40w	97⅝"	22½	**54.00**

*Extension unit. Similar to 25H24 except that it is furnished with a No. 3001A Rigid Coupling, two No. 25S00 Center Castings, two No. 25R047 Translucent Shields, and 6-inch conductor leads coming out of each end.

FITTINGS FOR SEMI-DIRECT UNITS



No. 25E00 **No. 25S00** **No. 25E00**

Cat. No.	Fitting	Lgth. In.	For Lamps	Pkg. Wt.	Price Each
***25E00**	End Casting	----	----------	5¾	**$2.50**
***25S00**	Center Casting	----	----------	3½	**2.20**
†25R023	Translucent Shield	23	24"–20w	7	**7.20**
†25R035	Translucent Shield	35	36"–30w	9	**9.60**
†25R047	Translucent Shield	47	48"–40w	12	**12.00**

*Standard package 4. †Standard package 6.

WIREMOLD FLUORESCENT UNITS

DESIGN 21SW SLIMLINE UNITS

White Finish

Wired and Assembled. With Lampholders (Ballast and Lamp not included)



21SW42—21SW64

Cat. No.	Overall Length Inches	Lamps No.	Lamps Size	Unit Pkg.	Std. Pkg.	Price Each
21SW42	43¼	1	42T6	1	6	**$8.50**
21SW42X	42	1	42T6	1	6	**8.00**
21SW48	49¼	1	48T12	1	6	**10.10**
21SW48X	48	1	48T12	1	6	**9.80**
21SW64	65¼	1	64T6	1	6	**9.80**
21SW64X	64	1	64T6	1	6	**9.00**
21SW72	73¼	1	72T8 or 72T12	1	6	**10.90**
21SW72X	72	1	72T8 or 72T12	1	6	**10.20**
21SW96	97¼	1	96T8 or 96T12	1	6	**12.40**
21SW96X	96	1	96T8 or 96T12	1	6	**11.70**

Catalog numbers without letter X designate units equipped with 1 No. 2110A End Connector and 1 No. 2110B Blank End Fitting.

Catalog numbers with letter X designate units without end fittings but equipped with 1 2101A Coupling for extension use.

REFLECTOR AND LAMPHOLDERS

Cat. No.	Fitting	Std. Pkg.	Price Per 100 Pieces
21S91	Reflector for 42-in. Lamp.....	6	**$209.00**
21S92	Reflector for 64-in. Lamp.....	6	**363.00**
2126S*	Slimline Lampholder, 660W, 250V (Low Voltage End)..	5	**217.10**
2126SA*	Slimline Lampholder, 660W, 1000V. (High Voltage End)	5	**231.00**

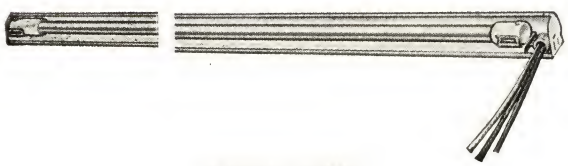
Unit package, 1.

*Designed for use with No. 2100 Raceway.

Reflectors for 72 and 96-inch lamps not available.

DESIGN 41SW SLIMLINE SHOWCASE UNITS

Pearl Gray Finish—Reflecting Surface, White



41SW44—41SW66

Units consist of one-piece base (with continuous reflector) and cover section to take lamp for which unit is designed. Equipped with lampholders and wired with No. 18, 600-volt 75° Type T white and red conductors with 5-ft. leads extending from one end. Ballast box for housing 200MA type ballast included. Lamps and ballasts not included.

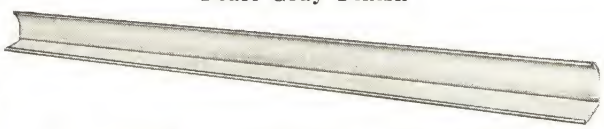
Cat. No.	Lamps No.	Lamps Size	Overall Length Inches	With Ballast Box No.	Std. Pkg.	Price Each
41SW44	1	42T6	43½	41K01	10	**$16.50**
41SW66	1	64T6	65½	41K01	10	**17.60**
41SW86	2	42T6	85½	41K01	5	**25.90**
41SW108	2	42T6-64T6	107½	41K03	5	**28.60**
41SW130	2	64T6	129½	41K02	5	**33.00**

Unit package, 1.

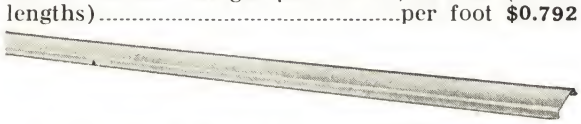
WIREMOLD FLUORESCENT UNITS

DESIGN 41SW SLIMLINE SHOWCASE PARTS

Pearl Gray Finish

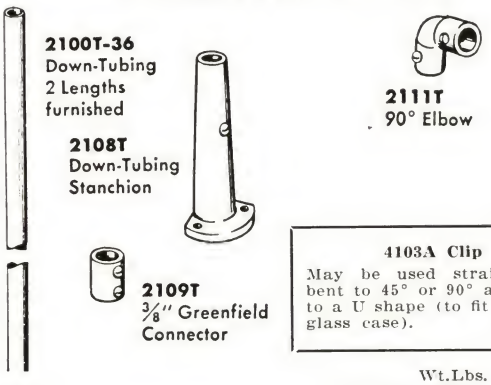


No. 4100B Base. Reflecting surface white. 100 feet to carton. Weight per 100 ft., 29 lbs. (10 ft. lengths).....per foot **$0.792**



No. 4100C Cover (white finish). 100 feet to carton. Weight per 100 feet, 14 lbs. (5 foot lengths).....per foot **$0.264**

STANDARD KIT—No. 21T-1A



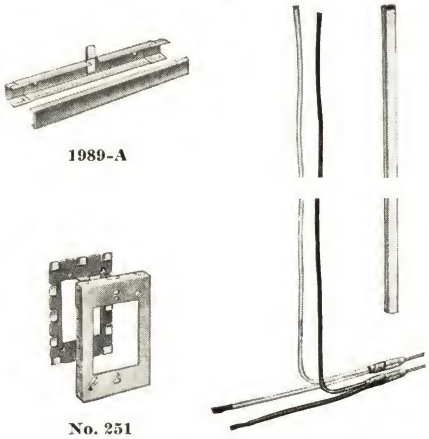
4103A Clip
May be used straight or bent to 45° or 90° angle or to a U shape (to fit an all-glass case).

Cat. No.	Description	Unit Pkg.	Std. Pkg.	Wt.Lbs. Std. Pkg.	Price Per 100
21T-1A	Down-Tubing Kit....	1	6	10	**$5.20***
4103A	Clip	10	20	¾	**34.70**
2111T	90 Degree Elbow	5	20	3	**74.80**

*Per kit.

TAKE-OFF KIT No. 200-19

(Wall Outlet to No. 1900)



Consists of one No. 251 Extension Adapter, one 15-inch length of No. 200 Wiremold, one No. 1989A Reducing Connector, and Wiring Harness of No. 12 Type R Conductors. Everything necessary to extend from existing wall outlet to No. 1900.

Price, No. **200-19** Take-Off Kit.....per 100 **$242.00**

WIRE and CABLE

We represent the manufacturers of wire and cable listed below and described on the following pages.

CRESCENT INSULATED WIRE & CABLE CO.

ROME CABLE CORPORATION

TRIANGLE CONDUIT & CABLE CO., INC.

PARANITE WIRE & CABLE DIVISION,
ESSEX WIRE CORP.

WALKER BROTHERS

THE RADIX WIRE COMPANY

CIRCLE WIRE & CABLE CORPORATION

HATFIELD WIRE & CABLE COMPANY

PLASTIC WIRE & CABLE CORPORATION

RUBBER-INSULATED BUILDING WIRE AND CABLE

SINGLE CONDUCTOR

Code Grade Type R—600 Volts

Heat-Resisting Grade Type RH — 600 Volts

Moisture-Resisting Grade Type RW—600 Volts

Solid Conductors, Single Braid



Size A.W.G.	Conductors No. of Strands	Diam. Inches	Ins. Thick. Inches	Overall Diam. Inches	Net Wt. Lb. per 1000 Ft.
14	Solid	.06408	2/64	.19	26
12	Solid	.08081	2/64	.21	35
10	Solid	.1019	3/64	.23	49
8	Solid	.1285	4/64	.28	80
*†6	Solid	.1620	4/64	.32	115
	Stranded Conductors, Single Braid				
14	7	.0726	2/64	.20	27
12	7	.0915	2/64	.22	37
10	7	.116	3/64	.24	52
8	7	.146	4/64	.30	84

Solid Conductors, Double Braid or Tape and Braid



14	Solid	.06408	2/64	.22	29
12	Solid	.08081	2/64	.24	38
10	Solid	.1019	3/64	.26	54
8	Solid	.1285	4/64	.32	85
*6	Solid	.1620	4/64	.36	120

Stranded Conductors, Double Braid or Tape and Braid

Double braid or tape and braid at Manufacturer's option on No. 6 and larger.

14	7	.0726	2/64	.23	30
12	7	.0915	2/64	.25	40
10	7	.116	3/64	.27	56
8	7	.146	4/64	.33	90
6	7	.184	4/64	.38	126
4	7	.232	4/64	.45	190
3	7	.260	4/64	.48	230
2	7	.292	4/64	.51	278
1	19	.332	5/64	.59	364
1/0	19	.373	5/64	.63	443
2/0	19	.418	5/64	.67	540
3/0	19	.470	5/64	.73	663
4/0	19	.528	5/64	.78	814
C.M.					
250,000	37	.575	6/64	.86	962
300,000	37	.630	6/64	.92	1139
350,000	37	.681	6/64	.97	1300
400,000	37	.728	6/64	1.02	1473
500,000	37	.814	6/64	1.10	1815
600,000	37	.893	7/64	1.21	2177
700,000	61	.964	7/64	1.28	2512
750,000	61	.998	7/64	1.32	2673
800,000	61	1.031	7/64	1.35	2848
900,000	61	1.093	7/64	1.41	3194
1,000,000	61	1.152	7/64	1.47	3530
1,250,000	91	1.289	8/64	1.64	4400
1,500,000	91	1.412	8/64	1.76	5240
1,750,000	127	1.526	8/64	1.88	6060
2,000,000	127	1.631	8/64	1.98	6890

†Not listed by Underwriters.

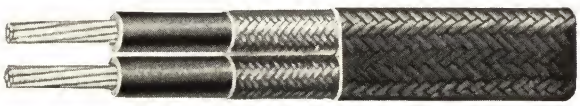
*Not permitted by N.E.C. for installation in raceways.

The above data are approximate and subject to normal manufacturing tolerances.

RUBBER-INSULATED BUILDING WIRE AND CABLE

TWIN CONDUCTOR

Code Grade Type RD—600 Volts



Solid Conductors, Double Braid

Size A.W.G.	Conductors No. of Strands	Diameter Inches	Insulation Thickness Inches	Overall Diameter Inches	Net Wt. Lb. per 1000 Ft.
14	Solid	.06408	2/64	.41x.22	62
12	Solid	.08081	2/64	.45x.24	82
10	Solid	.1019	3/64	.49x.26	114
8	Solid	.1285	4/64	.60x.32	174
*6	Solid	.1620	4/64	.68x.36	285
	Stranded Conductors, Double Braid				
14	7	.0726	2/64	.43x.23	64
12	7	.0915	2/64	.47x.25	84
10	7	.116	3/64	.52x.27	124
8	7	.146	4/64	.64x.33	186
6	7	.184	4/64	.72x.38	295

Made of two solid or stranded soft, tinned copper conductors, each insulated with Code, Type R; Heat-resisting, Type RH; and Type RW for moist locations.

Covered with a saturated braid, one black and one white for polarity. The two conductors are laid parallel and then covered with a closely woven braid, thoroughly saturated and finished with a flame- and moisture-resisting compound.

Duplex—Parallel—Solid

Size A.W.G.	No. and Dia. of Strands	Rubber Wall 64ths	Approx. Outside Dia.	Approx. Net Wt. M Feet Pounds	Std. Pkg.
14	1x.064	2	.220x.410	65	500′
12	1x.081	2	.240x.445	90	500′
10	1x.102	3	.270x.495	120	500′
8	1x.128	4	.335x.625	187	500′
6	1x.162	4	.360x.670	265	500′
	Duplex—Parallel—Stranded				
14	7x.0242	2	.230x.430	72	500′
12	7x.0305	2	.260x.475	95	500′
10	7x.0385	3	.290x.535	127	500′
8	7x.0486	4	.350x.655	198	500′
6	7x.0612	4	.380x.720	288	500′

TYPE RF FIXTURE WIRE—300 VOLTS

1. Tinned copper conductor. 2. Rubber insulation. 3. Cotton braid saturated with moisture-resisting, flame-retarding compound, smoothly finished in black, white, red, green, blue and yellow colors for identification.

Solid

Size A.W.G.	Ampere Carrying Capacity	No. and Dia. of Strands	Rubber Wall 64ths	Approx. Outside Dia.	Approx. Net Wt. M Feet	Std. Lgth. Feet Spls.	App. Shpg. Wt. Lbs.
18	5	1x40.30	1	.14	12	1000′	60
18	5	1x40.30	2	.16	15	500′	39
‡16	7	1x50.82	1	.15	16	1000′	81
16	7	1x50.82	2	.17	20	500′	50
		Stranded					
18	5	7x15.3	1	.11	9	1000′	63
18	5	7x15.3	2	.13	12	500′	44
‡16	7	7x19.2	1	.12	12	1000′	90
16	7	7x19.2	2	.14	16	500′	58

Standard package, 5 spools in carton.

‡Not listed by Underwriters.

*Not permitted by N.E.C. for installation in raceways.

The above data are approximate and subject to normal manufacturing tolerances.

RUBBER-INSULATED LEAD-COVERED WIRE AND CABLE—600 VOLTS



Approved by National Board of Fire Underwriters for use in underground ducts, mines, tunnels or other places where moisture is encountered. Made in single, two or three conductors, solid or stranded, soft tinned copper each insulated with Code, Type R; Heat-resisting, Type RH; and Type RW, for moist locations; or special rubber compound.

Multiple conductors are polarized black and white for two conductors, and black, white and red for three conductors, with either tapes or moisture-repellent braids. The two conductors are paralleled and leaded; the three conductors are cabled with jute fillers to make round, taped and leaded.

Type RL and RHL—Single Conductor—Solid

Size Awg. or CM	No. and Dia. of Strands	Thickness Rubber Inches	Thickness Lead Inches	Diam. Overall Inches	Lgth. Per Reel	Approx Wt.Lbs. Std.Pkg
14	.064	2/64	2/64	.250	1000′	167
12	.081	2/64	2/64	.270	1000′	194
10	.102	3/64	3/64	.320	1000′	295
8	.128	4/64	3/64	.380	1000′	368
*6	.162	4/64	4/64	.440	1000′	576
*4	.204	4/64	4/64	.490	1000′	590

Type RL and RHL—Single Conductor—Stranded

14	7x.0242	2/64	2/64	.260	1000′	173
12	7x.0305	2/64	2/64	.280	1000′	202
10	7x.0385	3/64	3/64	.340	1000′	308
8	7x.0486	4/64	3/64	.400	1000′	433
6	7x.0612	4/64	4/64	.460	1000′	609
4	7x.0772	4/64	4/64	.510	1000′	723
2	7x.0974	4/64	4/64	.570	1000′	855
1	19x.0664	5/64	4/64	.640	1000′	1016
1/0	19x.0745	5/64	4/64	.680	1000′	1133
2/0	19x.0837	5/64	4/64	.725	1000′	1275
3/0	19x.0940	5/64	4/64	.780	1000′	1452
4/0	19x.1055	5/64	4/64	.835	1000′	1659
250M	37x.0822	6/64	5/64	.945	1000′	2286
300M	37x.0900	6/64	5/64	1.000	1000′	2524
350M	37x.0973	6/64	5/64	1.055	1000′	2755
400M	37x.1040	6/64	5/64	1.100	1000′	2979
500M	37x.1162	6/64	5/64	1.185	1000′	3517
600M	37x.1273	7/64	6/64	1.325	500′	2261
700M	61x.1071	7/64	6/64	1.400	500′	2478
750M	61x.1109	7/64	6/64	1.430	500′	2587
800M	61x.1145	7/64	6/64	1.460	500′	2693
900M	61x.1215	7/64	6/64	1.530	500′	2904
1000M	61x.1280	7/64	6/64	1.580	500′	3211
1250M	91x.1172	8/64	7/64	1.780	500′	3995
1500M	91x.1284	8/64	7/64	1.900	500′	4500
1750M	127x.1174	8/64	7/64	2.025	500′	5188
2000M	127x.1255	8/64	7/64	2.130	500′	5691

*Not permitted by N.E.C. for installation in raceways.

The above data are approximate and subject to normal manufacturing tolerances.

RUBBER-INSULATED LEAD-COVERED WIRE AND CABLE—600 VOLTS

Type RDL—Duplex Parallel—Solid

Size A.W.G.	No. and Diam. of Strands	Thickness Rubber Inches	Thickness Lead Inches	Approx. Overall Inches	Lgth. Per Reel	Approx. Wt. Lbs. Std. Pkg.
14	.064	2/64	2/64	.250x .440	1000′	308
12	.081	2/64	2/64	.300x .510	1000′	450
10	.102	3/64	3/64	.320x .550	1000′	495
8	.128	4/64	3/64	.380x .660	1000′	635
*6	.162	4/64	4/64	.470x .810	1000′	905
*4	.204	4/64	4/64	.490x .860	1000′	980

Type RDL—Duplex Parallel—Stranded

14	7x.0243	2/64	2/64	.250x .440	1000′	274
12	7x.0305	2/64	2/64	.300x .510	1000′	460
10	7x.0385	3/64	3/64	.320x .550	1000′	530
8	7x.0486	4/64	3/64	.380x .660	1000′	670
6	7x.0612	4/64	4/64	.470x .840	1000′	960
4	7x.0772	4/64	4/64	.520x .910	1000′	1330
2	7x.0972	4/64	4/64	.580x1.03	1000′	1600
1	19x.0664	5/64	5/64	.670x1.19	1000′	2110
1/0	19x.0745	5/64	5/64	.720x1.27	1000′	2450
2/0	19x.0837	5/64	5/64	.760x1.36	1000′	2710
3/0	19x.0940	5/64	5/64	.810x1.47	1000′	3070
4/0	19x.1055	5/64	5/64	.870x1.58	500′	1840

Type RML — Three Conductor Round — Solid

Size Awg. or CM						
14	.064	3/64	3/64	.560	1000′	665
12	.081	3/64	4/64	.600	1000′	750
10	.102	3/64	4/64	.640	1000′	840
8	.128	4/64	4/64	.770	1000′	1110
*6	.162	4/64	5/64	.860	1000′	1400
*4	.204	4/64	5/64	1.03	1000′	1710

Type RML — Three Conductor Round — Stranded

14	7x.0242	2/64	3/64	.570	1000′	690
12	7x.0305	2/64	4/64	.610	1000′	780
10	7x.0385	3/64	4/64	.670	1000′	900
8	7x.0486	4/64	4/64	.770	1000′	1155
6	7x.0612	4/64	5/64	.920	1000′	1475
4	7x.0772	4/64	5/64	1.030	1000′	2070
2	7x.0974	4/64	5/64	1.160	1000′	2670
1	19x.0664	5/64	6/64	1.330	500′	1780
1/0	19x.0745	5/64	6/64	1.420	500′	1975
2/0	19x.0837	5/64	6/64	1.520	500′	2305
3/0	19x.0940	5/64	6/64	1.630	500′	2580
4/0	19x.1055	5/64	7/64	1.790	500′	3130
250M	37x.0822	6/64	7/64	1.960	500′	3715
300M	37x.0900	6/64	7/64	2.080	500′	4090
350M	37x.0973	6/64	7/64	2.190	500′	4540
400M	37x.1040	6/64	8/64	2.320	500′	5370
500M	37x.1162	6/64	8/64	2.500	500′	6080

*Not permitted by N.E.C. for installation in raceways.

The above data are approximate and subject to normal manufacturing tolerances.

THERMOPLASTIC BUILDING WIRES

TYPE T AND TW—600 VOLT SERVICE

Maximum Operating Temperature 60° C. (140° F.)



The outstanding feature of Type T and TW wire (formerly Type SN and SNW) is its special insulation which has a low moisture absorption rate. Type TW is ideally suited for installation in wet locations and for continuous submersion without the protection of a lead sheath. Type T is recommended for general purpose wiring.

Thermoplastic building wires are superaging, free stripping and easy pulling. They are resistant to flame, moisture, oils, acids and alkalies. These wires have a smooth, glossy finish and are available in a variety of distinctive, non-fading colors.

Size Awg	Stranding	Thermoplastic Wall in In.	Approx. Overall in In.	Approx. Net Wt. in Lb. 1000 Ft.
14	Solid	2/64	0.130	20
12	Solid	2/64	0.147	28
10	Solid	2/64	0.168	41
8	Solid	3/64	0.227	69
*6	Solid	4/64	0.29	110
*4	Solid	4/64	0.33	160
14	7	2/64	0.140	22
12	7	2/64	0.158	30
10	7	2/64	0.182	44
8	7	3/64	0.246	75
6	7	4/64	0.314	119
4	7	4/64	0.363	176
2	7	4/64	0.423	263
1	19	5/64	0.496	339
1/0	19	5/64	0.537	416
2/0	19	5/64	0.583	514
3/0	19	5/64	0.634	633
4/0	19	5/64	0.692	787
CM				
250,000	37	6/64	0.763	914
300,000	37	6/64	0.819	1084
350,000	37	6/64	0.870	1267
400,000	37	6/64	0.916	1415
500,000	37	6/64	1.002	1751
600,000	37	7/64	1.122	2106
700,000	61	7/64	1.194	2430
750,000	61	7/64	1.228	2596
800,000	61	7/64	1.260	2757
900,000	61	7/64	1.324	3083
1,000,000	61	7/64	1.373	3414
1,250,000	91	8/64	1.54	4250
1,500,000	91	8/64	1.67	5060
1,750,000	127	8/64	1.78	5860
2,000,000	127	8/64	1.89	6680

*Not listed in N.E.C.

The above data are approximate and subject to normal manufacturing tolerances.

MACHINE TOOL, CONTROL AND SWITCHBOARD WIRE

THERMOPLASTIC INSULATION—600 VOLTS*

Machine Tool Wire meets the demand for a cable that can withstand exposure too severe for rubber insulated wires. For wiring machine tools, acid treating plants, chemical plants, and other applications exposing cables to deteriorating influences.

Underwriters' approved for 60° C. in oil and 80° C. in air operating temperature.



Size A.W.G. or CM	Strands	Heavy Insulation Wall Thick. 64ths	Heavy Insulation App. O.D. Inches	Heavy Insulation App. Net Wt. M Feet	Standard Insulation Wall Thick. 64ths	Standard Insulation Approx. O.D. Inches	Standard Insulation Approx. Net Wt. M Feet
18	Sol.	..	.....	....	2	.103	9
18	7	..	.....	....	2	.110	10
18	19	..	.....	....	2	.110	10
16	Sol.	..	.....	....	2	.114	13
16	7	..	.....	....	2	.123	14
16	19	..	.....	....	2	.122	13
14	Sol.	3	.158	23	2	.130	20
14	7	3	.168	25	2	.140	22
14	19	3	.168	23	2	.140	20
12	Sol.	3	.175	32	2	.147	28
12	7	3	.186	33	2	.158	30
12	19	3	.184	32	2	.156	28
10	Sol.	3	.196	45	2	.168	41
10	7	3	.210	48	2	.182	44
10	19	3	.222	55	2	.194	51
8	Sol.	4	.254	74	3	.227	69
8	7	4	.272	79	3	.246	75
8	19	4	.278	83	3	.252	80
6	Sol.	..	.....	....	4	.293	112
6	7	..	.....	....	4	.314	119
6	19	..	.....	....	4	.324	124
4	7	..	.....	....	4	.363	176
4	19	..	.....	....	4	.376	188
4	61	..	.....	....	4	.388	200
2	7	..	....	....	4	.423	263
2	19	..	.....	....	4	.436	276
2	61	..	.....	....	4	.454	301
1	19	..	.....	....	5	.496	339
0	19	..	.....	....	5	.537	416
00	19	..	.....	....	5	.583	514
000	19	..	.....	....	5	.634	633
0000	19	..	.....	....	5	.692	787

*For current carrying capacity, refer to National Electrical Code.

NEON SIGN—GAS TUBE, OIL BURNER IGNITION CABLE

TYPE GTO—THERMOPLASTIC

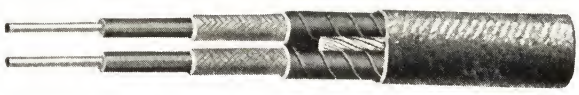


Bare stranded conductor, Polyethylene insulation, Thermoplastic jacket. Smaller diameter for easy installation, less weight, and less space. Smooth finish for easy pull through conduit. Suitable for either outdoor or indoor installations. Jacket is resistant to acids, alkalies, alcohol, gasoline, mineral oils, paraffin waxes, and water.

Size A.W.G.	Stranding	Type	Voltage	Overall Diameter
14	19	GTO-10	10,000	.245
14	19	GTO-15	15,000	.27
12	19	GTO-15	15,000	.28
10	19	GTO-15	15,000	.31

The above data are approximate and subject to normal manufacturing tolerances.

NON-METALLIC SHEATHED CABLES
WITH TYPE R INSULATED CONDUCTORS
Two Conductor—Parallel—600 Volts



Tinned copper conductors. Code rubber insulation. Composite paper twine and cotton braid — color coded. Folder paper — treated against moisture — wrapped on. Conductors laid parallel with jute ripcord filler in the interstices (tinned ground wire instead of jute for grounded cables). Cotton braid saturated with moisture-resisting, flame-retarding compound smoothly finished — black.

Inspected and labeled by Underwriters' Laboratories.

Applications. New and old house wiring for all circuits beyond entrance; wiring boats and trailers; for extensions to new outlets; for circuits for radios and refrigerators.

Without Ground

Size A.W.G.	Ampere Carrying Capacity	Stranding No. and Mil Dia. of Wires	Rubber Wall 64ths	Approx. O.S. Dia.	Approx. Net Wt. M Feet	Std. Lgth. Coils
14	15	1x 64.08	2	.355x.575	90	250′
12	20	1x 80.81	2	.367x.597	110	250′
10	25	1x101.9	2	.370x.630	160	250′
8	35	7x 48.6	3	.505x.805	240	125′
6	50	7x 61.2	4	.590x.872	330	125′
4	70	7x 77.2	4	.635x.962	470	125′

With Ground Wire

14	15	1x 64.08	2	.355x.575	100	250′
12	20	1x 80.81	2	.367x.597	120	250′
10	25	1x101.9	2	.370x.630	170	250′
8	35	7x 48.6	3	.505x.825	260	125′
6	50	7x 61.2	4	.590x.872	370	125′
4	70	7x 77.2	4	.635x.962	540	125′

Three Conductor—Round—600 Volts

Three conductor cables are constructed same as above except that the three conductors are cabled with jute. A durable non-metallic sheathed cable for concealed or open wiring in locataions that are reasonably dry and where the cable will not be exposed to mechanical injury.

Without Ground

Size A.W.G.	Ampere Carrying Capacity	Stranding No. and Mil Dia. of Wires	Rubber Wall 64ths	Approx. O.S. Dia.	Approx. Net Wt. M Feet	Std. Lgth. Coils
14	15	1x 64.08	2	.630	135	250′
12	20	1x 80.81	2	.672	165	250′
10	25	1x101.9	2	.685	245	250′
8	35	7x 48.6	3	.900	425	125′
6	50	7x 61.2	4	.947	545	125′
4	70	7x 77.2	4	1.000	620	125′

With Ground Wire

14	15	1x 64.08	2	.630	145	250′
12	20	1x 80.81	2	.672	180	250′
10	25	1x101.9	2	.685	260	250′
8	35	7x 48.6	3	.900	435	125′
6	50	7x 61.2	4	.959	560	125′
4	70	7x 77.2	4	1.000	700	125′

Also available having conductors insulated with Type TW compound.

The above data are approximate and subject to normal manufacturing tolerances.

SERVICE ENTRANCE CABLE
FACTS ABOUT SERVICE CABLES

One of the major developments of the last number of years with respect to house wiring has been the introduction of service cable. In spite of the large amount of it which is being installed, there is still considerable uncertainty on the part of members of the industry as to the characteristics of the different types and their proper application.

Service Cable is made in four different types designated by Underwriters as follows:

1. SD or service drop cable.
2. SE or service entrance cable.
3. ASE or armored service entrance cable.
4. USE or underground service cable. (Durasheath.)

With the exception of type USE, or underground service cable, most service cable is made with a concentric bare neutral. All insulated wires are Performance Grade rubber-insulated, weatherproof braided.

A cellophane serving is placed over the braid, on all service cables, for easy side bending. The cellophane is colored for color coding and it prevents the spreading and drying of saturants.

The factors which influence the type of cable to be used for a given installation are:

1. Economy.
2. Whether the location of the cable may cause it to be subjected to accidental injury.
3. Whether the distance from the pole to the house would offer too large a span for the cable to enable it to be self-supporting.
4. Whether the type of residence or location is of such nature as to make the entrance by underground more desirable than by aerial cable.
5. Local regulations.

The essential differences in the four types of cable are as follows:

1. SD cable: This cable, instead of a flame-retarding braid, has a weather-resisting cotton braid. Type SD cable should be used from the pole to the weather-head and, if used down the house, must be protected by conduit or metallic tubing.
2. SE Cable: This cable is designed for use in protected locations down the side of the house and attached directly to it without insulators. It has a moisture resisting and flame-retarding braid and may be used for range wiring.
3. ASE Cable: This is the only type that can be used in unprotected locations without additional mechanical protection. It is essentially an armored cable. It is generally constructed with combination of special heavy fibrous and steel covering designed to resist impact.
4. USE Cable: This is distinctly an underground cable with protective covering of Neoprene to keep out moisture, acids and alkalies. Durasheath is approved by the Underwriters for this use.

SERVICE ENTRANCE CABLE

Styles of Service Cables

Besides these essential differences between types, both the SD and SE types are made in several different constructions or styles.

SD Cable is made in two styles:

1. Style C for 2-conductor cable.
2. Style CF for 3-conductor cable.

The differences are as follows:

Style C cable has one insulated conductor with a concentric bare neutral that covers approximately 85 per cent of the insulated conductor.

Style CF has two insulated conductors but the neutral covers approximately 65 per cent of the conductors.

When we come to SE cable we have two different styles as follows:

1. Style SC for 2 conductor.
2. Style SCF for 3-conductor.

The differences are as follows:

Style SC cable might be considered basic for this type. It has a single insulated conductor with a concentric bare neutral covering 85 per cent of the insulated conductor.

Style SCF differs from Style SC only in the use of an additional insulated conductor and the fact that the neutral need cover only 65 per cent of the insulated conductors.

SERVICE DROP CABLE

TYPE SD—208 VOLTS



For use in continuous overhead connection between pole and meter, switch or service equipment.

TWO-CONDUCTOR—TYPE C

Size Awg. Insulated	Size Awg. Uninsulated Neutral	Insula. Thickn. 64ths	Overall Diam. of Cable Inch	Approx. Net Wt. Lbs. per M Ft.	*Stand. Reel Lgth. Feet	+K.O. Size Inches
Solid Insulated Conductors						
**12	12	2	.300	80	1000	¾
10	10	3	.330	110	1000	¾
8	8	4	.40	160	1000	¾
‡6	8	4	.43	180	1000	¾
‡6	6	4	.45	210	1000	¾
Stranded Insulated Conductors						
**12	12	2	.28	67	1000	¾
10	10	3	.35	110	1000	¾
8	8	4	.410	170	1000	¾
6	8	4	.45	210	1000	1
6	6	4	.460	240	1000	¾
4	6	4	.52	305	1000	1
4	4	4	.530	350	1000	¾
2	4	4	.61	465	1000	1¼
2	2	4	.610	530	500	1

THREE-CONDUCTOR—TYPE CF

Solid Insulated Conductors						
**12	12	2	.320x .490	140	1000	¾
10	10	3	.350x .540	170	1000	¾
8	8	4	.410x .680	270	1000	¾
‡6	8	4	.450x .740	315	1000	1
‡6	6	4	.450x .750	335	1000	1
Stranded Insulated Conductors						
**12	12	2	.290x .460	110	1000	¾
10	10	3	.360x .580	185	1000	¾
8	8	4	.430x .690	290	1000	¾
6	8	4	.490x .790	360	500	1
6	6	4	.490x .790	390	500	1
4	6	4	.560x .900	500	500	1
4	4	4	.570x .910	580	500	1
2	4	4	.650x1.030	780	500	1¼
2	2	4	.660x1.040	830	500	1¼

*500 ft. reels or coils can be furnished if desired.
**No. 12 Awg. Insulated Conductors are Medium - Hard Drawn Copper.
Sizes larger than No. 12 are soft drawn copper.
+K.O. represents Knock-out plug size.
‡Not permitted by N.E.C. for installation in raceways.

The above data are approximate and subject to normal manufacturing tolerances.

SERVICE ENTRANCE CABLE

TWO CONDUCTOR—TYPE SE STYLE U UNARMORED—208 VOLTS



This cable does not require conduit protection where extending along exterior or entering buildings.

Tinned copper conductors. High grade rubber insulation. Cotton braid — saturated. Tinned copper wires wrapped on helically and Rubber-filled tapes. Cotton braid saturated with moisture-resisting, flame-retarding compound, smoothly finished to take house paint readily and dusted. For service from pole to house, down to meter as both a drop and service entrance cable.

TWO-CONDUCTOR

Size Awg. Insulated	Size Awg. Uninsulated Neutral	Insula. Thickn. 64ths	Overall Diam. of Cable Inch	Approx. Net Wt. Lbs. per M Ft.	*Stand. Reel Lgth. Feet
Solid Insulated Conductors					
**12	12	3	.33	21	250′
10	10	3	.36	28	250′
8	8	4	.44	43	250′
‡6	8	4	.46	49	250′
‡6	6	4	.48	57	250′
Stranded Insulated Conductors					
**12	12	3	.34	23	250′
10	10	3	.38	31	250′
8	8	4	.45	46	250′
6	8	4	.48	56	250′
6	6	4	.51	66	250′
4	6	4	.55	65	200′
4	4	4	.58	75	200′
2	4	4	.64	73	150′
2	2	4	.67	84	150′

THREE CONDUCTOR—TYPE SE STYLE U UNARMORED—208 VOLTS

Same construction as above except that the two insulated conductors — color coded — are laid parallel. In service entrance cables the use of the bare neutral conductor over the insulated conductors not only reduces the cost but because of the difficulty of tapping the cable, prevents the unauthorized use of current. Continuous cables from pole to meter prevents further losses. Tape acts as an additional moisture seal.

THREE-CONDUCTOR

Size Awg. Insulated	Size Awg. Uninsulated Neutral	Insula. Thickn. 64ths	Overall Diam. of Cable Inch	Approx. Net Wt. Lbs. per M Ft.	*Stand. Reel Lgth. Feet
Solid Insulated Conductors					
**12	12	3	.33x .52	36	250′
10	10	3	.36x .56	47	250′
8	8	4	.43x .69	72	250′
‡6	8	4	.45x .74	67	200′
‡6	6	4	.46x .75	54	150′
Stranded Insulated Conductors					
**12	12	3	.34x .54	37	250′
10	10	3	.38x .60	51	250′
8	8	4	.44x .72	76	250′
6	8	4	.49x .80	77	200′
6	6	4	.51x .84	63	150′
4	6	4	.57x .93	81	150′
4	4	4	.58x .94	89	150′
2	4	4	.64x1.07	78	100′
2	2	4	.65x1.07	87	100′

*500 ft. reels or coils can be furnished if desired.
**No. 12 Awg. Insulated Conductors are Medium - Hard Drawn Copper.
Sizes larger than No. 12 are soft drawn copper.
+K.O. represents Knock-out plug size.
‡Not permitted by N.E.C. for installation in raceways.

The above data are approximate and subject to normal manufacturing tolerances.

SERVICE ENTRANCE CABLE

TWO CONDUCTOR—TYPE SE STYLE A ARMORED—208 VOLTS



Has light steel armor over concentric neutral. Tinned copper conductor. High grade rubber insulation. Cotton braid — saturated. Tinned copper wires wrapped on helically. Galvanized steel armor. Rubber-filled tapes. Cotton braid saturated with moisture-resisting, flame-retarding compound, smoothly finished to take house paint readily and dusted. Entrance cables with steel armor used from drop leads to entrance switch.

Solid Conductors

Size Awg. Insulated	Size Awg. Uninsulated Neutral	Insula. Thickn. 64ths	Overall Diam. of Cable Inch	Approx. Net Wt. Lbs. Per M Ft.	*Stand. Reel Lgth. Feet
**12	12	3	.35	105	250′
10	10	3	.38	140	250′
8	8	4	.45	205	250′
‡6	8	4	.48	230	250′
‡6	6	4	.50	265	250′

Stranded Conductors

**12	12	3	.36	110	250′
10	10	3	.40	150	250′
8	8	4	.47	215	250′
6	8	4	.51	250	250′
6	6	4	.53	300	250′
4	6	4	.57	365	200′
4	4	4	.60	420	200′
2	4	4	.66	530	150′
2	2	4	.69	610	150′

THREE CONDUCTOR—TYPE SE STYLE A ARMORED—208 VOLTS

Three-conductor service entrance cables are constructed same as above except that two color-coded conductors are laid parallel with the third conductor wrapped on helically forming a flat finished cable. The use of service entrance cables effect economies of first cost as well as low installation and maintenance costs as they eliminate the use of rigid conduit for service entrance installations.

Solid Conductors

Size Awg. Insulated	Size Awg. Uninsulated Neutral	Insula. Thickn. 64ths	Overall Diam. of Cable Inch	Approx. Net Wt. Lbs. Per M Ft.	*Stand. Reel Lgth. Feet
**12	12	3	.35x.53	175	250′
10	10	3	.38x.57	230	250′
8	8	4	.45x.70	340	250′
‡6	8	4	.48x.75	390	200′
‡6	6	4	.48x.75	410	200′

Stranded Conductors

**12	12	3	.36x.55	185	250′
10	10	3	.40x.61	245	250′
8	8	4	.46x.73	355	250′
6	8	4	.52x.81	440	200′
6	6	4	.53x.85	470	150′
4	6	4	.60x.94	605	150′
4	4	4	.61x.95	650	150′
2	4	4	.66x1.07	850	100′
2	2	4	.67x1.08	940	100′

‡Not permitted by N.E.C. for installation of raceways.

*1000 ft. reels can be furnished if desired.

**No. 12 Awg. Insulated Conductors are Medium-Hard Drawn Copper. Sizes larger than No. 12 are soft drawn copper.

The above data are approximate and subject to normal manufacturing tolerances.

WEATHERPROOF WIRE

SOLID—DOUBLE AND TRIPLE BRAID



Size B.&S.	Double Braid Approx. Lbs. Per 1000 Ft.	Double Braid Approx. Lbs. Per Mile	Double Braid Diam. In. Over Insulation	Triple Braid Approx. Lbs. Per 1000 Ft.	Triple Braid Approx. Lbs. Per Mile	Triple Braid Diam. In. Over Insulation
0000	709	3,744	21/32	745	3,933	47/64
000	574	3,031	39/64	605	3,195	11/16
00	462	2,439	9/16	495	2,613	41/64
0	374	1,975	33/64	402	2,123	19/32
1	288	1,521	13/32	305	1,610	29/64
2	233	1,230	3/8	250	1,320	27/64
3	185	977	11/32	199	1,050	13/32
4	149	787	21/64	163	861	3/8
5	122	646	5/16	135	710	11/32
6	99	523	9/32	112	591	21/64
8	68	359	1/4	75	396	13/64
9	54	283	15/64	62	325	5/16
10	46	243	7/32	53	280	17/64
12	30	158	11/64	35	185	13/64
14	21	111	5/32	25	132	3/16

STRANDED TRIPLE BRAID

Capacity Circular Mils	Approx. Wt. Lbs. Per 1000 Ft.	Approx. Wt. Lbs. Per Mile	Diam. Over Insulation	No. Wires	Diam. Each
1,000,000	3,520	18,586	1 5/8	61	.128
900,000	3,200	16,896	1 7/8	61	.1215
800,000	2,875	15,180	1 23/64	48	.129
700,000	2,477	13,079	1 3/32	37	.1375
600,000	2,155	11,378	1 7/32	37	.128
500,000	1,820	9,610	1 1/8	27	.136
450,000	1,646	8,691	1 5/64	27	.129
400,000	1,499	7,915	1 1/32	27	.122
350,000	1,305	6,890	1	19	.136
300,000	1,105	5,834	15/16	19	.126
250,000	937	4,948	7/8	12	.145
B. & S. Gauge					
0000	800	4,225	53/64	7	.174
000	639	3,374	49/64	7	.155
00	510	2,693	23/32	7	.138
0	415	2,191	21/32	7	.123
1	310	1,637	33/64	7	.1095
2	252	1,330	29/64	7	.0975
3	206	1,090	1/2	7	.0872
4	166	877	15/32	7	.077
5	140	740	27/64	7	.070
6	115	608	23/64	7	.062
8	80	425	21/64	7	.049

STRANDED DOUBLE BRAID

Circular Mils					
1,000,000	3,456	18,248	1 17/32	61	.128
900,000	3,050	16,104	1 11/32	61	.1215
800,000	2,729	14,410	1 17/64	48	.129
700,000	2,353	12,423	1 3/16	37	.1375
600,000	2,093	11,050	1 1/8	37	.128
500,000	1,725	9,108	1 1/32	27	.136
450,000	1,563	8,253	1	27	.129
400,000	1,385	7,313	15/16	27	.122
350,000	1,200	6,336	29/32	19	.136
300,000	1,045	5,518	27/32	19	.126
250,000	878	4,636	25/32	12	.145
B. & S. Gauge					
0000	744	3,928	3/4	7	.174
000	600	3,168	23/32	7	.155
00	480	2,534	11/64	7	.138
0	388	2,049	37/64	7	.123
1	300	1,584	15/32	7	.1095
2	240	1,267	13/32	7	.0975
3	190	1,004	11/32	7	.0872
4	155	818	23/64	7	.077
5	126	668	21/64	7	.070
6	102	539	5/16	7	.062
8	68	359	9/32	7	.049

Sizes up to 2000M can be supplied.

The above data are approximate and subject to normal manufacturing tolerances.

VARNISHED CAMBRIC INSULATED BUILDING WIRE AND CABLE
600 VOLTS



SINGLE CONDUCTOR

Conductors Size A.W.G.	No. of Strands	Diam. Inches	†Current Carrying Cap. Amp.	Varnished Cambric Thick. In.	Braided Cables: Single Braided Overall Diameter Inches	Single Braided Net Wt. Lbs. per 1000 Ft.	Double Braided Overall Diam Inches	Double Braided Net Wt. Lbs. per 1000 Ft.	Taped and Braided Overall Diam. Inches	Taped and Braided Net Wt. Lbs. per 1000 Ft.	Lead Sheathed Cables: Sheath Thickness Inches	Lead Sheathed Cables: Overall Diam. Inches	Lead Sheathed Cables: Net Wt. Lbs. per 1000 Ft.
Solid Conductors													
14	.....	.06408	18	3/64	.188	25	.253	36	.....	.....	3/64	.252	179
12	.....	.08081	25	3/64	.235	39	.300	53	.....	.....	3/64	.269	209
10	.....	.1019	30	3/64	.256	54	.321	69	.....	.....	3/64	.290	230
8	.....	.1285	40	3/64	.282	74	.347	91	.....	.....	3/64	.316	269
6	.....	.1620	60	4/64	.352	120	.417	139	.....	.....	3/64	.381	358
Stranded Conductors													
6	7	.184	60	4/64	.373	130	.438	151	.....	.....	3/64	.405	377
4	7	.232	85	4/64	.422	180	.487	203	.....	.....	3/64	.453	468
2	7	.292	110	4/64	.482	265	.547	294	.....	.....	3/64	.515	720
1	19	.332	120	5/64	.553	340	.618	373	.....	.....	4/64	.613	876
1/0	19	.373	150	5/64	.594	415	.659	451	.....	.....	4/64	.654	973
2/0	19	.418	180	5/64	.640	510	.705	548	.....	.....	4/64	.700	1,116
3/0	19	.470	210	5/64	.691	620	.756	661	.....	.....	4/64	.751	1,290
4/0	19	.528	270	5/64	.749	765	.814	810	.....	.....	4/64	.809	1,690
C.M.													
250,000	37	.575	300	6/64	.828	908	.913	966	.....	.....	5/64	.919	1,926
300,000	37	.630	330	6/64	.903	1090	.988	1153	.....	.....	5/64	.974	2,170
350,000	37	.681	360	6/64	.955	1260	1.040	1327	.....	.....	5/64	1.026	2,386
400,000	37	.728	390	6/64	1.001	1420	1.086	1490	.....	.....	5/64	1.072	2,609
450,000	37	.772	.....	6/64	1.050	1598	1.135	1672	.....	.....	5/64	1.121	2,825
500,000	37	.814	480	6/64	.....	.....	1.172	1866	1.117	1776	5/64	1.158	3,040
550,000	61	.855	.....	7/64	.....	.....	1.213	2023	1.158	1930	6/64	1.261	3,548
600,000	61	.893	540	7/64	.....	.....	1.282	2238	1.227	2140	6/64	1.300	3,850
700,000	61	.964	600	7/64	.....	.....	1.366	2591	1.311	2486	6/64	1.384	4,298
750,000	61	.998	630	7/64	.....	.....	1.388	2762	1.333	2655	6/64	1.406	4,400
1,000,000	61	1.152	780	7/64	.....	.....	1.541	3577	1.486	3458	6/64	1.559	5,518
1,500,000	91	1.412	1020	8/64	.....	.....	1.861	5310	1.806	5165	7/64	1.894	8,101
1,750,000	127	1.526	.....	8/64	.....	.....	1.973	6107	1.918	5954	7/64	2.006	9,076
2,000,000	127	1.631	1260	8/64	.....	.....	2.067	6975	2.012	6814	7/64	2.100	10,091

3-CONDUCTOR

Conductors Size A.W.G	No. Strands	Diameter Inches	†Current Carrying Capacity Amperes	Varnished Cambric Thickness Inches	Taped and Braided Cables: Overall Diameter Inches	Taped and Braided Cables: Net Wt.Lbs. per 1000 Ft.	Lead Sheathed Cables: Sheath Thickness Inches	Lead Sheathed Cables: Overall Diameter Inches	Lead Sheathed Cables: Net Wt.Lbs. per 1000 Ft.
Solid Conductors									
14	....	.06408	18	3/64	.420	103	3/64	.449	390
12	....	.08081	25	3/64	.456	131	3/64	.485	445
10	....	.1019	30	3/64	.501	187	4/64	.562	663
8	....	.1285	40	3/64	.557	257	4/64	.618	788
6	....	.1620	60	4/64	.697	395	4/64	.757	1,066
Stranded Conductors									
6	7	.184	60	4/64	.742	412	4/64	.803	1,128
4	7	.232	85	4/64	.848	598	5/64	.939	1,641
2	7	.292	110	4/64	.997	899	5/64	1.068	2,076
1	19	.332	120	5/64	1.164	1,172	6/64	1.252	2,825
1/0	19	.373	150	5/64	1.252	1,441	6/64	1.340	3,202
2/0	19	.418	180	5/64	1.351	1,756	6/64	1.439	3,661
3/0	19	.470	210	5/64	1.461	2,146	6/64	1.549	4,204
4/0	19	.528	270	5/64	1.586	2,630	6/64	1.674	4,868
C.M.									
250,000	37	.575	300	6/64	1.755	3,149	7/64	1.873	6,087
300,000	37	.630	330	6/64	1.874	3,708	7/64	1.992	6,847
350,000	37	.681	360	6/64	1.986	4,258	7/64	2.104	7,584
400,000	37	.728	390	6/64	2.084	4,796	7/64	2,202	8,289
450,000	37	.772	.....	6/64	2.205	5,356	8/64	2.340	9,566
500,000	37	.814	480	6/64	2.284	5,916	8/64	2.419	10,292
550,000	61	.855	.....	**6/64	2.436	6,617	8/64	2.571	11,260
600,000	61	.893	540	**6/64	2.517	7,169	8/64	2.652	11,979
700,000	61	.964	600	**6/64	2.698	8,289	8/64	2.833	13,444
750,000	61	.998	630	**6/64	2.745	7,817	8/64	2.880	14,061
1,000,000	61	1.152	780	**6/64	3.074	11,478	8/64	3.209	17,349

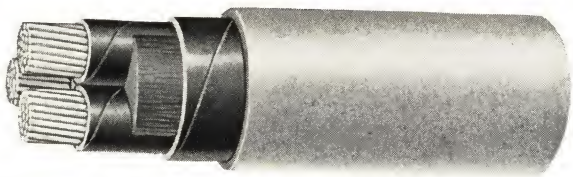
**Belt dimensions, 6/64 inch on individual conductors; 7/64-inch overall belt.

†National Electrical Code—sizes not showing ratings must be given by L.I.A.

The above data are approximate and subject to normal manufacturing tolerances.

VARNISHED CAMBRIC INSULATED POWER CABLE





Rated Voltage, 2001-3000 Phase to Phase (Grounded or Ungrounded)

Conductors Solid or Concentric Size A.W.G.	Stranded No. Strands	Varnished Cambric Thickness In.	Single Conductor — Braided Cables — Overall Diam. In.	Net Wt. Lb. per 1000 Ft.	Lead Sheathed Cables — Thickness In.	Overall Diam. In.	Net Wt. Lb. per 1000 Ft.
10	(Sol.)	6/64	.355	78	3/64	384	322
8	(Sol.)	6/64	.381	101	3/64	.410	362
6	(Sol.)	6/64	.415	140	3/64	.444	422
6	7	6/64	.436	151	3/64	468	450
4	7	6/64	.485	205	3/64	.515	602
2	7	6/64	.545	296	4/64	.609	814
1	19	6/64	.585	354	4/64	.646	926
1/0	19	6/64	.626	432	4/64	.687	1029
2/0	19	6/64	.672	528	4/64	.733	1168
3/0	19	6/64	.723	635	4/64	.784	1338
4/0	19	6/64	.781	781	5/64	.872	1750
C.M.							
250,000	37	7/64	.858	942	5/64	.950	1987
500,000	37	7/64	†1.147	†1803	5/64	1.190	3247
750,000	61	7/64	†1.333	†2655	6/64	1.406	4400
1,000,000	61	7/64	†1.486	†3458	6/64	1.559	5518

Rated Voltage, 4001-5000 Phase to Phase (Grounded)

Varnished Cambric Thickness In.	‡Single Conductor — Braided Cables — Overall Diam. In.	Net Wt. Lb. per 1000 Ft.	Lead Sheathed Cables — Sheath Thickness In.	Overall Diam. In.	Net Wt. Lb. per 1000 Ft.
9/64	.941	991	5/64	1.012	2104
9/64	†1.210	†1866	6/64	1.283	3545
9/64	†1.395	†2711	6/64	1.468	4661
9/64	†1.548	†3535	6/64	1.621	5689

Rated Voltage, 2001-3000 Phase to Phase (Grounded or Ungrounded)

Conductor Size A.W.G.	Type	Varnished Cambric Thickness Inches — Conductor	Belt	2-Conductor — Braid Covered — Overall Diam. In	Net Wt. Lb. per 1000 ft.	Lead Sheathed — Sheath Thickness In.	Overall Diam. In.	Net Wt. Lb. per 1000 Ft.
10	Sol.	5/64	2/64	.644	215	4/64	.704	786
8	Sol.	5/64	2/64	.696	275	4/64	.756	900
6	Sol.	5/64	2/64	.764	373	4/64	.825	1054
6	Str.	5/64	2/64	.806	389	5/64	.897	1311
4	Str.	5/64	2/64	.924	565	5/64	.995	1585
2	Str.	5/64	2/64	1.044	822	5/64	1.115	1966
1	Str.	6/64	2/64	†1.218	†1058	6/64	1.291	2645
1/0	Str.	6/64	2/64	†1.300	†1262	6/64	1.373	2970
2/0	Str.	6/64	2/64	†1.392	†1526	6/64	1.465	3369
3/0	Str.	6/64	2/64	†1.494	†1849	6/64	1.567	3840
4/0	Str.	6/64	2/64	†1.610	†2256	6/64	1.683	4413
C.M.								
250,000	Str.	6/64	2/64	†1.704	†2598	7/64	1.807	5311
500,000	Str.	6/64	2/64	†2.197	†4852	8/64	2.332	8959
750,000	Str.	6/64	3/64	†2.598	†7106	8/64	2.733	12058
1,000,000	Str.	6/64	3/64	†2.904	†9244	8/64	3.039	14860

3-Conductor — Braid Covered — Overall Diam. In.	Net Wt. Lb. per 1000 Ft.	Lead Sheathed — Thickness In.	Overall Diam. In.	Net Wt. Lb. per 1000 Ft.
.683	269	4/64	.743	925
.739	344	4/64	.800	1058
.812	466	5/64	.903	1466
.857	486	5/64	.948	1542
.982	706	5/64	1.053	1865
†1.141	† 1027	5/64	1.182	2313
†1.296	† 1322	6/64	1.369	3112
†1.384	† 1578	6/64	1.457	3494
†1.483	† 1908	6/64	1.556	3963
†1.593	† 2311	6/64	1.666	4518
†1.717	† 2820	7/64	1.820	5647
†1.818	† 3248	7/64	1.922	6248
†2.347	† 6065	8/64	2.482	10540
†2.776	† 8883	8/64	2.911	14186
†3.105	†11555	8/64	3.240	17483

Rated Voltage, 4001-5000 Phase to Phase (Grounded or Ungrounded)

8	Sol.	6/64	4/64	.822	354	5/64	.913	1275	.889	442	5/64	.960	1500
6	Sol.	6/64	4/64	.910	460	5/64	.981	1452	.962	575	5/64	1.034	1708
6	Str.	6/64	4/64	.952	482	5/64	1.023	1530	1.008	603	5/64	1.080	1801
4	Str.	6/64	4/64	1.050	661	5/64	1.121	1808	†1.143	† 826	5/64	1.185	2127
2	Str.	6/64	4/64	†1.200	† 937	6/64	1.273	2482	†1.272	† 1171	6/64	1.346	2920
1	Str.	6/64	4/64	†1.280	†1108	6/64	1.353	2778	†1.358	† 1385	6/64	1.432	3268
1/0	Str.	6/64	4/64	†1.362	†1318	6/64	1.435	3111	†1.446	† 1648	6/64	1.520	3660
2/0	Str.	6/64	4/64	†1.454	†1586	6/64	1.527	3506	†1.545	† 1983	6/64	1.619	4125
3/0	Str.	6/64	4/64	†1.556	†1914	6/64	1.629	3982	†1.655	† 2393	7/64	1.759	5125
4/0	Str.	6/64	4/64	†1.672	†2320	7/64	1.775	4964	†1.779	† 2900	7/64	1.883	5840
C.M.													
250,000	Str.	7/64	4/64	†1.828	†2744	7/64	1.931	5655	†1.947	† 3430	7/64	2.049	6653
500,000	Str.	7/64	4/64	†2.321	†5024	8/64	2.456	9381	†2.476	† 6280	8/64	2.611	11037
750,000	Str.	7/64	4/64	†2.691	†7275	8/64	2.826	12397	†2.874	† 9094	8/64	3.009	14585
1,000,000	Str.	7/64	4/64	†2.997	†9446	8/64	3.132	15220	†3.203	†11808	9/64	3.369	18747

†Weights and diameters are for cables with tape and braid; other braided cables have single braid only.

‡For ungrounded neutral service, heavier insulation walls are required.

All conductors untinned, soft annealed copper (also supplied with tin or alternate special Amaloy coated strands).

Construction data for cables of other sizes, types and voltage ratings will be supplied on request.

The above data are approximate and subject to normal manufacturing tolerances.

NON-METALLIC UNDERGROUND CABLE

POWER TYPE—600 VOLTS



Single-Conductor

Size A.W.G.	No. Strands	Insulation Thickness Inches	Overall Diameter Inches	Net Wt.Lb. per 1000 Ft.
14	Solid	3/64	.523	118
12	Solid	3/64	.540	133
10	Solid	3/64	.561	153
8	Solid	4/64	.618	195
6	7	4/64	.674	253
4	7	4/64	.722	346
2	7	4/64	.782	448
1	19	5/64	.853	545
1/0	19	5/64	.896	635
2/0	19	5/64	.941	741
3/0	19	5/64	.991	878
4/0	19	5/64	1.051	1051
C.M.				
250,000	37	6/64	1.128	1227
300,000	37	6/64	1.184	1408
350,000	37	6/64	1.234	1588
400,000	37	6/64	1.281	1766
450,000	37	6/64	1.388	2025
500,000	37	6/64	1.429	2198
600,000	61	7/64	1.540	2595
750,000	61	7/64	1.645	3120
900,000	61	7/64	1.740	3636
1,000,000	61	7/64	1.799	3975
1,250,000	91	8/64	1.967	4894
1,500,000	91	8/64	2.090	5788
2,000,000	127	8/64	2,309	7487
2-Conductor—Twin Flat Construction				
14	Solid	3/64	.721	188
12	Solid	3/64	.755	217
10	Solid	3/64	.797	255
8	Solid	4/64	.912	336
6	7	4/64	1.023	469
4	7	4/64	1.119	607
2	7	4/64	1.239	823
1	19	5/64	1.444	1006
1/0	19	5/64	1.530	1174
2/0	19	5/64	1.620	1393
3/0	19	5/64	1.720	1650
4/0	19	5/64	1.840	2055
3-Conductor				
14	Solid	3/64	.752	273
12	Solid	3/64	.788	313
10	Solid	3/64	.834	367
8	Solid	4/64	.957	467
6	7	4/64	1.077	676
4	7	4/64	1.180	879
2	7	4/64	1.310	1179
1	19	5/64	1.526	1538
1/0	19	5/64	1.618	1793
2/0	19	5/64	1.715	2111
3/0	19	5/64	1.823	2513
4/0	19	5/64	1.952	2991
C.M.				
250,000	37	6/64	2.118	3565
300,000	37	6/64	2.239	4112
350,000	37	6/64	2.347	4654
400,000	37	6/64	2.448	5199
450,000	37	6/64	2.543	5738
500,000	37	6/64	2.631	6401
600,000	61	7/64	2.870	7593
750,000	61	7/64	3.096	9168

The above data are approximate and subject to normal manufacturing tolerances.

NON-METALLIC UNDERGROUND CABLE

CONCENTRIC TYPE, 2-CONDUCTOR
0-13,000 VOLTS



Rated Voltage Phase to Phase	Max. Volt. Phase to Ground	Insulated Cond. Size A.W.G.	Insulated Cond. No. Str.	Insulation Thick. In.	Uninsulated Cond. Construction	Overall Diam. In.	Net Wt.Lb. per 1000 Feet
0–600	††350	8	Sol.	4/64	23/#21	.575	259
		6	Sol.	4/64	23/#19	.624	342
		6	7	4/64	23/#19	.646	354
		4	7	4/64	23/#17	.712	487
		2	7	4/64	23/#15	.796	690
		1	19	5/64	23/#14	.881	856
2001–3000	1700	8	Sol.	7/64	24/#21	.677	327
		6	Sol.	8/64	24/#19	.757	436
		6	7	8/64	24/#19	.779	453
		4	7	8/64	24/#17	.846	592
		2	7	8/64	24/#15	.929	810
		1	19	8/64	24/#14	.983	954
4001–5000	2900	8	Sol.	10/64	24/#20	.778	411
		6	Sol.	10/64	24/#19	.819	483
		6	19	10/64	24/#19	.841	500
		4	19	10/64	24/#17	.908	647
		2	19	10/64	24/#15	.992	863
		1	37	10/64	24/#14	1.046	1013
7001–8000	4600	8	Sol.	12/64	24/#19	.848	480
		6	Sol.	12/64	24/#18	.891	564
		6	19	12/64	24/#18	.913	584
		4	19	12/64	24/#17	.971	703
		2	19	12/64	24/#15	1.054	922
		1	37	12/64	24/#14	1.108	1069
12001–13000	7500	6	Sol.	17/64	24/#17	1.026	718
		6	19	17/64	24/#17	1.048	743
		4	19	17/64	24/#16	1.107	867
		2	19	17/64	24/#15	1.179	1055
		1	37	17/64	24/#14	1.296	1262

††If used as a service entrance cable within the jurisdiction of the National Board of Fire Underwriters the maximum voltage to ground is 208 volts.

RURAL TYPE NON-METALLIC UNDERGROUND CABLE

2001-8000 VOLTS



For underground installation in rural areas where the distribution problem is characterized by long cable runs, scattered service connections, and relatively few customers per mile. Especially adaptable for installation by use of cable plow.

Rated Voltage Phase to Phase	Phase to Ground Voltage	Insulated Conductor Size A.W.G.	Insulated Conductor Construction	Insulation Thick. In.	Overall Diam. In.	Net Wt.Lb. per 1000 Ft.
2001–3000	1700	8	Solid	7/64	.57	215
		6	Solid	8/64	.65	305
		6	7	8/64	.67	330
		4	7	8/64	.74	440
		2	7	8/64	.82	615
		1	19	8/64	.88	790
4001–5000	2900	8	Solid	10/64	.68	265
		6	Solid	10/64	.72	315
		6	19	10/64	.75	350
		4	19	10/64	.82	470
		2	19	10/64	.90	650
		1	37	10/64	.95	800
7001–8000	4600	8	Solid	12/64	.75	315
		6	Solid	12/64	.79	420
		6	19	12/64	.82	450
		4	19	12/64	.88	545
		2	19	12/64	.96	715
		1	37	12/64	1.01	840

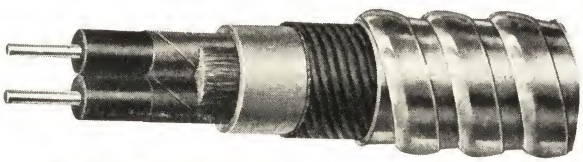
The above data are approximate and subject to normal manufacturing tolerances.

PARKWAY STEEL ARMORED CABLE

2-CONDUCTOR—0-5,000 VOLTS



Twin Flat Construction, Double Flat Steel Tape Armor



Round Construction, Interlocking Steel Tape Armor

Rated Voltage, 0-600, Phase to Phase (Grounded or Ungrounded)

Conductors (Solid or Concentric) Stranded Size A.W.G.	Type	Insulation Thickness In.	Lead Sheath Thickness In.	Twin Flat Construction Overall Diam. In.	Twin Flat Construction Net Wt.Lb. per 1000 Ft.	Round Construction Overall Diam. In.	Round Construction Net Wt.Lb. per 1000 Ft.
14	Solid	3/64	3/64	.66x .85	569	.93	708
12	Solid	3/64	3/64	.67x .88	625	.96	770
10	Solid	3/64	4/64	.73x .95	835	1.03	1033
8	Solid	4/64	4/64	.78x1.07	1053	1.15	1295
6	Solid	4/64	4/64	.82x1.13	1193	1.21	1495
6	Str.	4/64	4/64	.84x1.18	1276	1.26	1580
4	Str.	4/64	5/64	.92x1.31	1718	1.39	2067
2	Str.	4/64	5/64	1.04x1.49	2265	1.51	2588
1	Str.	5/64	5/64	1.11x1.63	2672	1.65	3050
1/0	Str.	5/64	6/64	1.18x1.74	3245	1.83	3865
2/0	Str.	5/64	6/64	1.23x1.83	3605	1.92	4300
3/0	Str.	5/64	6/64	1.28x1.93	4036	2.02	4830
4/0	Str.	5/64	6/64	1.34x2.05	4550	2.14	5455

Rated Voltage, 2001-3000, Phase to Phase (Grounded or Ungrounded)

10	Solid	7/64	5/64	.88x1.23	1428	1.31	1765
8	Solid	7/64	5/64	.91x1.28	1550	1.36	1915
6	Solid	8/64	5/64	1.03x1.48	2035	1.50	2318
6	Str.	8/64	5/64	1.06x1.52	2144	1.54	2422
4	Str.	8/64	5/64	1.10x1.62	2437	1.64	2707
2	Str.	8/64	6/64	1.19x1.77	3131	1.87	3730
1	Str.	8/64	6/64	1.23x1.85	3412	1.94	4070
1/0	Str.	8/64	6/64	1.28x1.93	3726	2.02	4464
2/0	Str.	8/64	6/64	1.32x2.02	4083	2.11	4897
3/0	Str.	8/64	6/64	1.37x2.12	4532	2.21	5433
4/0	Str.	8/64	7/64	1.46x2.27	5456	2.36	6545

Rated Voltage, 4001-5000, Phase to Phase (Grounded or Ungrounded)

8	Solid	10/64	5/64	1.06x1.53	2120	1.55	2405
6	Solid	10/64	5/64	1.10x1.60	2330	1.62	2642
6	Str.	10/64	6/64	1.15x1.67	2708	1.76	3223
4	Str.	10/64	6/64	1.20x1.77	3018	1.86	3536
2	Str.	10/64	6/64	1.26x1.88	3445	1.98	4120
1	Str.	10/64	6/64	1.30x1.97	3728	2.06	4460
1/0	Str.	10/64	6/64	1.34x2.05	4047	2.14	4860
2/0	Str.	10/64	7/64	1.42x2.18	4787	2.27	5756
3/0	Str.	10/64	7/64	1.44x2.28	5280	2.37	6318
4/0	Str.	10/64	7/64	1.53x2.40	5830	2.49	7012

Construction data for cables of other sizes, types and voltage ratings will be supplied on request.

The above data are approximate and subject to normal manufacturing tolerances.

PARKWAY STEEL ARMORED CABLE

3-CONDUCTOR—0-5,000 VOLTS



Double Flat Steel Tape Armor



Interlocking Steel Tape Armor

0-600 Volts (Grounded or Ungrounded)

Conductors (Solid or Concentric) Stranded Size A.W.G.	Type	Insulation Thickness In.	Lead Sheath Thickness In.	Double Flat Steel Tape Armor Overall Diam. In.	Double Flat Steel Tape Armor Net Wt.Lb. per 1000 Ft.	Interlocking Steel Tape Armor Overall Diam. In.	Interlocking Steel Tape Armor Net Wt.Lb. per 1000 Ft.
14	Solid	3/64	4/64	.93	1015	1.01	973
12	Solid	3/64	4/64	.97	1112	1.05	1063
10	Solid	3/64	4/64	1.01	1226	1.09	1191
8	Solid	4/64	4/64	1.14	1542	1.22	1508
6	Solid	4/64	5/64	1.24	2015	1.32	1977
6	Str.	4/64	5/64	1.29	2127	1.37	2103
4	Str.	4/64	5/64	1.46	2800	1.47	2503
2	Str.	4/64	5/64	1.58	3370	1.60	3050
1	Str.	5/64	6/64	1.77	4290	1.86	4095
1/0	Str.	5/64	6/64	1.86	4760	1.95	4546
2/0	Str.	5/64	6/64	1.95	5300	2.04	5063
3/0	Str.	5/64	6/64	2.06	5980	2.15	5717
4/0	Str.	5/64	7/64	2.22	7200	2.31	6942
C.M.							
250,000	Str.	6/64	7/64	2.39	8150	2.48	7783
350,000	Str.	6/64	7/64	2.62	9860	2.71	9538
500,000	Str.	6/64	8/64	2.93	12870	3.02	12515

2001-3000 Volts (Grounded or Ungrounded)

10	Solid	7/64	5/64	1.32	2082	1.40	2068
8	Solid	7/64	5/64	1.37	2273	1.45	2268
6	Solid	8/64	5/64	1.57	2991	1.59	2708
6	Str.	8/64	5/64	1.62	3171	1.64	2846
4	Str.	8/64	6/64	1.75	3950	1.84	3759
2	Str.	8/64	6/64	1.88	4490	1.97	4382
1	Str.	8/64	6/64	1.97	4990	2.06	4771
1/0	Str.	8/64	6/64	2.06	5470	2.15	5255
2/0	Str.	8/64	7/64	2.18	6470	2.28	6223
3/0	Str.	8/64	7/64	2.30	7190	2.39	6948
4/0	Str.	8/64	7/64	2.42	8020	2.51	7749
C.M.							
250,000	Str.	9/64	7/64	2.59	8990	2.68	8696
350,000	Str.	9/64	8/64	2.85	11390	2.94	11060
500,000	Str.	9/64	8/64	3.13	13880	3.22	13515

4001-5000 Volts (Grounded or Ungrounded)

8	Solid	10/64	5/64	1.63	3132	1.65	2906
6	Solid	10/64	6/64	1.74	3745	1.83	3580
6	Str.	10/64	6/64	1.78	3935	1.87	3736
4	Str.	10/64	6/64	1.89	4410	1.98	4201
2	Str.	10/64	6/64	2.02	5050	2.11	4816
1	Str.	10/64	6/64	2.10	5470	2.19	5222
1/0	Str.	10/64	7/46	2.22	6430	2.31	6185
2/0	Str.	10/64	7/64	2.32	7020	2.41	6756
3/0	Str.	10/64	7/64	2.43	7740	2.52	7473
4/0	Str.	10/64	7/64	2.56	8580	2.65	8285
C.M.							
250,000	Str.	11/64	8/64	2.76	10190	2.85	9891
350,000	Str.	11/64	8/64	2.98	12050	3.07	11705
500,000	Str.	11/64	8/64	3.27	14550	3.36	14165

Construction data for cables of other sizes, types and voltage ratings will be supplied on request.

The above data are approximate and subject to normal manufacturing tolerances.

HIGH-VOLTAGE CABLE

High-voltage portable power cables are designed for a wide variety of purposes. In general their use covers both transmission of power from the supply to the portable equipment and distribution of that power to the electrical machines or control devices which are installed in or on the equipment.

The principal use of portable power cables is to convey energy for electrically operated shovels, dredges, cranes, etc., where arduous service and safety must combine for uninterrupted production and long cable life.

Further use of high-voltage cables of this type is found wherever both high voltage and portability are required, such as in construction work and for temporary or emergency power transfer in central stations and substations during equipment repairs and alterations. They are available for operating voltages up to and including 13,000 volts, in single and multi-conductor form, and in a wide range of conductor sizes.

There are three general types of high-voltage cables:

Type W, without ground wires.
Type G, with ground wires.
Type SH (shielded) with or without ground wires.

Type W—(Without Ground Wires)

This cable is not recommended for service exceeding 2500 volts, although it can be furnished for higher voltages. Even at 2500 volts, special precautions should be used in the handling of the cable to minimize hazard of shock to workmen.

Has heavy walls of insulation and jacket.

Type G—(With Ground Wires)

The same construction as Type W except that it has a flexible ground wire in each filler space. While cables operating above 2500 volts should preferably be shielded, the ground wires in Type G cables in effect provide some shielding and afford a certain degree of protection to operators when the wires are grounded at both ends of the cable length. In some instances Type G cables have proved satisfactory at 5000 volts. The ground wires are normally of tinned copper strands covered with a cushioning cotton braid. If desired, ground wires composed of tinned steel strands can be supplied in place of copper.

Type SH—(Shielded—With or Without Ground Wires)

Similar to Types W and G, as previously described, except for the addition of shielding braids, and are recommended for all operating voltages above 250 volts. These cabes are classified in four groups as follows:

Type	Ground Wires	Shielding
SH-A	Without	On Each Conductor
SH-B	Without	Over Cabled Conductors
SH-C	With	Over Cabled Conductors
SH-D	With	On Each Conductor

Shielding braids over the assembled conductors confine the voltage stress within the core of the cable. When applied over the separate conductors, shielding confines the stress to the individual conductor insulations, eliminating corona and the attendant formation of ozone which is deleterious to rubber. Shielding braids, properly grounded, afford protection to the cable and to the operator.

For operating voltages up to 6000 volts, a shield over the assembled conductors with the use of ground wires (Type SH-C) is generally recommended. For voltages over 6000 volts, shielding over the individual conductors with the use of ground wires (Type SH-D) is recommended.

HIGH-VOLTAGE CABLE



Type G—2001-3000 Volts—With Ground Wires

3-Conductor

Conductors Size A.W.G	Conductors Construction	Current Carrying Cap. Amp.	Insulation Thickness In.	Ground Wire Construction	Overall Diam. In.	Shipping Weight Pounds 500-Reels Ft.	Shipping Weight Pounds 1000-Reels Ft.	Deduction in Wt. Lb. per 1000 Feet for Type W
8	49/#25	35	7/64	3x 49/#31	1.20	607	1175	40
6	49/#23	50	8/64	3x 49/#29	1.40	770	1500	60
6	133/#27	50	8/64	3x 49/#29	1.40	775	1510	60
4	49/#21	65	8/64	3x133/#31	1.50	1085	1820	100
4	133/#25	65	8/64	3x133/#31	1.60	1155	1960	100
2	133/#23	90	8/64	3x133/#29	1.70	1350	2340	155
2	259/#26	90	8/64	3x133/#29	1.70	1350	2340	155
1	133/#22	100	8/64	3x133/#28	1.90	1590	2830	195
1	259/#25	100	8/64	3x133/#28	1.90	1590	2830	195
1/0	133/#21	120	8/64	3x133/#27	2.00	1770	3390	250
1/0	259/#24	120	8/64	3x133/#27	2.00	1770	3390	250
2/0	133/#20	135	8/64	3x133/#26	2.10	2065	3880	315
2/0	259/#23	135	8/64	3x133/#26	2.10	2065	3880	315
3/0	259/#22	155	8/64	3x133/#25	2.20	2320	4390	395
3/0	427/#24	155	8/64	3x133/#25	2.20	2320	4390	395
4/0	259/#21	180	8/64	3x133/#24	2.40	2725	5200	495
4/0	427/#23	180	8/64	3x133/#24	2.40	2720	5240	495

4-Conductor

8	49/#25	30	7/64	4x 49/#32	1.40	720	1400	35
6	49/#23	40	8/64	4x 49/#30	1.60	1082	1815	55
6	133/#27	40	8/64	4x 49/#30	1.60	1095	1830	55
4	49/#21	55	8/64	4x 49/#28	1.70	1245	2140	90
4	133/#25	55	8/64	4x 49/#28	1.70	1260	2170	90
2	133/#23	75	8/64	4x133/#30	1.90	1618	2785	150
2	259/#26	75	8/64	4x133/#30	1.90	1618	2785	150
1	133/#22	85	8/64	4x133/#29	2.00	1810	3370	190
1	259/#25	85	8/64	4x133/#29	2.00	1810	3370	190
1/0	133/#21	100	8/64	4x133/#28	2.10	2020	3785	240
1/0	259/#24	100	8/64	4x133/#28	2.10	2020	3785	240
2/0	133/#20	115	8/64	4x133/#27	2.30	2395	4490	300
2/0	259/#23	115	8/64	4x133/#27	2.30	2395	4490	400
3/0	259/#22	130	8/64	4x133/#26	2.40	2710	5120	380
3/0	427/#24	130	8/64	4x133/#26	2.40	2697	5095	380

Rubber-sheathed portable cable molded in lead, having larger diameters or diameters other than those listed above, can also be furnished.

For Type W cables, weight can be approximated by using the last column for adjustment.

Type G—3001-4000 Volts—With Ground Wires

3-Conductor

6	49/#23	50	9/64	3x 49/#29	1.50	1007	1665	.....
6	133/#27	50	9/64	3x 49/#29	1.50	1017	1685	.....
4	49/#21	65	9/64	3x133/#31	1.60	1100	1950	.....
4	133/#25	65	9/64	3x133/#31	1.60	1162	1975	.....
2	133#/23	90	9/64	3x133/#29	1.80	1430	2510	.....
2	259/#26	90	9/64	3x133/#29	1.80	1430	2510	.....
1	133/#22	100	9/64	3x133/#28	1.90	1650	2850	.....
1	259/#25	100	9/64	3x133/#28	1.90	1650	2850	.....
1/0	133/#21	120	9/64	3x133/#27	2.00	1825	3350	.....
1/0	259/#24	120	9/64	3x133/#27	2.00	1825	3350	.....
2/0	133/#20	135	9/64	3x133/#26	2.10	2060	3870	.....
2/0	259/#23	135	9/64	3x133/#26	2.10	2060	3870	.....
3/0	259/#22	155	9/64	3x133/#25	2.30	2440	4580	.....
3/0	427/#24	155	9/64	3x133/#25	2.30	2437	4575	.....
4/0	259/#21	180	9/64	3x133/#24	2.40	2755	5210	.....
4/0	427/#23	180	9/64	3x133/#24	2.40	2860	5420	.....

Cables of larger sizes can also be furnished.

The above data are approximate and subject to normal manufacturing tolerances.

HIGH-VOLTAGE CABLE

Type G—4001-5000 Volts—With Ground Wires

3-Conductor

Conductors Size A.W.G.	Conductors Construction	Current Carrying Cap. Amp.	Insulation Thickness In.	Ground Wire Construction	Overall Diam. In.	Shipping Weight Pounds 500-Foot Reels	Shipping Weight Pounds 1000-Foot Reels
6	49/#23	50	10/64	3x 49/#29	1.60	1075	1800
6	133/#27	50	10/64	3x 49/#29	1.60	1080	1810
4	49/#21	65	10/64	3x133/#31	1.70	1220	2090
4	133/#25	65	10/64	3x133/#31	1.70	1230	2110
2	133/#23	90	10/64	3x133/#29	1.90	1555	2660
2	259/#26	90	10/64	3x133/#29	1.90	1555	2660
1	133/#22	100	10/64	3x133/#28	2.00	1725	3200
1	259/#25	100	10/64	3x133/#28	2.00	1725	3200
1/0	133/#21	120	10/64	3x133/#27	2.10	1867	3585
1/0	259/#24	120	10/64	3x133/#27	2.10	1867	3585
2/0	133/#20	135	10/64	3x133/#26	2.20	2170	4040
2/0	259/#23	135	10/64	3x133/#26	2.20	2170	4040
3/0	259/#22	155	10/64	3x133/#25	2.40	2535	4770
3/0	427/#24	155	10/64	3x133/#25	2.40	2542	4785
4/0	259/#21	180	10/64	3x133/#24	2.50	2875	5450
4/0	427/#23	180	10/64	3x133/#24	2.50	2870	5440

Cables of larger sizes can also be furnished.

Types SH-B and SH-C—Shielded Over Assembled Conductors

Type SH-A and SH-D—Shielded Over Individual Conductors



2001-3000 Volts

3-Conductor

Size AWG	Conductors Construction	‡	Insulation In.	Ground Wire	OD In.	Type SH-B without Ground Wires Shpg. Wt. Lb. 500-Ft. Rls.	Type SH-B without Ground Wires Shpg. Wt. Lb. 1000-Ft. Rls.	Type SH-C with Ground Wires Shpg. Wt. Lb. 500-Ft. Rls.	Type SH-C with Ground Wires Shpg. Wt. Lb. 1000-Ft. Rls.
8	49/#25	35	8/64	3x 42/#30	1.40	770	1380	790	1420
6	49/#23	50	9/64	3x 66/#30	1.60	1035	1740	1067	1805
6	133/#27	50	9/64	3x 66/#30	1.60	1035	1740	1067	1805
4	49/#21	65	9/64	3x102/#30	1.70	1160	1990	1210	2090
4	133/#25	65	9/64	3x102/#30	1.80	1230	2140	1280	2240
3	133/#24	75	9/64	3x126/#30	1.80	1275	2200	1335	2320
2	133/#23	90	9/64	3x162/#30	1.90	1400	2470	1475	2620
1	133/#22	100	9/64	3x198/#30	2.00	1625	2950	1717	3135
1/0	259/#24	120	9/64	3x198/#29	2.10	1775	3250	1892	3485
2/0	259/#23	135	9/64	3x216/#28	2.20	1965	3630	2125	3950
3/0	427/#24	155	9/64	3x216/#27	2.40	2275	4250	2475	4550
				3001-4000 Volts					
6	49/#23	50	10/64	3x 66/#30	1.70	1105	1880	1137	1945
6	133/#27	50	10/64	3x 66/#30	1.70	1105	1880	1137	1945
4	49/#21	65	10/64	3x102/#30	1.80	1230	2140	1280	2240
4	133/#25	65	10/64	3x102/#30	1.80	1237	2150	1287	2250
3	133/#24	75	10/64	3x126/#30	1.90	1355	2380	1415	2500
2	133/#23	90	10/64	3x162/#30	2.00	1560	2820	1635	2970
1	133/#22	100	10/64	3x198/#30	2.10	1710	3120	1802	3305
1/0	259/#24	120	10/64	3x198/#29	2.20	1870	3440	1987	3675
2/0	259/#23	135	10/64	3x216/#28	2.30	2060	3820	2220	4140
3/0	427/#24	155	10/64	3x216/#27	2.50	2375	4450	2575	4850
				4001-5000 Volts					
6	49/#23	50	12/64	3x 66/#30	1.80	1180	2030	1212	2095
6	133/#27	50	12/64	3x 66/#30	1.80	1185	2040	1217	2105
4	49/#21	65	12/64	3x102/#30	2.00	1465	2630	1515	2730
4	133/#25	65	12/64	3x102/#30	2.00	1470	2640	1520	2740
3	133/#24	75	12/64	3x126/#30	2.10	1595	2890	1655	3010
2	133/#23	90	12/64	3x162/#30	2.10	1655	3010	1730	3160
1	133/#22	100	12/64	3x198/#30	2.20	1805	3310	1897	3495
1/0	259/#24	120	12/64	3x198/#29	2.40	2055	3810	2172	4045
2/0	259/#23	135	12/64	3x216/#28	2.50	2265	4230	2425	4550
				5001-6000 Volts					
6	49/#23	50	13/64	3x 66/#30	1.90	1270	2200	1302	2265
6	133/#27	50	13/64	3x 66/#30	1.90	1270	2200	1302	2265
4	49/#21	65	13/64	3x102/#30	2.00	1465	2630	1515	2730
4	133/#25	65	13/64	3x102/#30	2.10	1600	2900	1650	3000
3	133/#24	75	13/64	3x126/#30	2.10	1600	2900	1660	3020
2	133/#23	90	13/64	3x162/#30	2.20	1735	3170	1810	3320
1	133/#22	100	13/64	3x198/#30	2.30	1905	3510	1997	3695
1/0	259/#24	120	13/64	3x198/#29	2.40	2060	3820	2177	4055
				6001-7000 Volts					
4	49/#21	65	15/64	3x102/#30	2.20	1650	3000	1700	3100
4	133/#25	65	15/64	3x102/#30	2.20	1650	3000	1700	3100
3	133/#24	75	15/64	3x126/#30	2.30	1785	3270	1845	3390
2	133/#23	90	15/64	3x162/#30	2.40	1930	3560	2005	3710
2	133/#23	90	15/64	3x162/#30	2.40	1930	3560	2005	3710
1	133/#22	100	15/64	3x198/#30	2.50	2050	3800	2142	3985

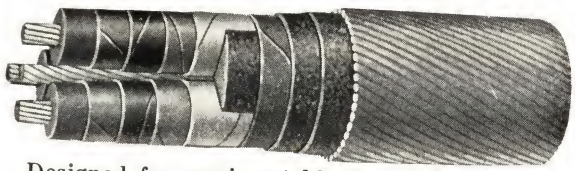
‡Current-carrying capacities in amperes.

Rubber sheathed portable cable molded in lead, having larger diameters other than those listed above, can also be furnished. 4-conductor Type SH are also supplied.

The above data are approximate and subject to normal manufacturing tolerances.

WIRE ARMORED CABLE

3-CONDUCTOR



Designed for semi-portable use, such as power supply to dredges, shovels, etc. The use of galvanized steel armor wire provides exceptional longitudinal strength, allowing long lengths to be pulled into position or moved about without imposing undue strain on the conductors or insulation. Protection is also afforded against fouling by ship anchors, abrasion, and impact of heavy bodies.

Conductors are of tinned, soft annealed copper, and are flexible stranded (I.P.E.C.A. Class C).

The insulation on the separate conductors is an ozone resistant compound, enclosed in a color-coded rubber-faced tape for conductor identification.

For cable operating at more than 3500 volts with the neutral ungrounded, and for all cable operating at more than 6000 volts, shielding recommendations can be obtained upon request.

Rated Voltage, 2001-3000 Phase to Phase

(Grounded or Ungrounded)

This cable does not contain shielding.

Conductors Size A.W.G.	Conductors No. Str.	Conductors Diameter Inches	Insulation Thickness Inches	Size of Armor Wires B.W.G.	Overall Diameter Inches	Net Weight Pounds per 1000 Ft.
6	19	.186	8/64	12	1.49	2,209
4	19	.234	8/64	12	1.59	2,539
2	19	.296	8/64	12	1.72	3,005
1	37	.333	8/64	12	1.81	3,323
1/0	37	.374	8/64	12	1.89	3,691
2/0	37	.420	8/64	12	1.99	4,135
3/0	37	.471	8/64	12	2.08	4,643
4/0	37	.533	8/64	10	2.28	5,806
C.M.						
250,000	61	.576	9/64	10	2.44	6,573
500,000	61	.815	9/64	10	2.69	10,109
1,000,000	91	1.153	9/64	8	3.78	17,569

Rated Voltage, 4001-5000 Phase to Phase

(Grounded or Ungrounded)

This cable does not contain shielding.

6	19	.186	10/64	12	1.62	2,470
4	19	.234	10/64	12	1.73	2,809
2	19	.296	10/64	12	1.86	3,290
1	37	.333	10/64	12	1.94	3,612
1/0	37	.374	10/64	12	2.03	3,901
2/0	37	.420	10/64	12	2.13	4,434
3/0	37	.471	10/64	10	2.29	5,478
4/0	37	.533	10/64	10	2.41	6,162
C.M.						
250,000	61	.576	11/64	10	2.58	6,945
500,000	61	.815	11/64	8	3.16	11,351
1,000,000	91	1.153	11/64	8	3.91	18,192

Rated Voltage, 6001-7000 Phase to Phase

(Ungrounded)

Has shielding over individual insulated conductors.

6	19	.186	14/64	12	2.00	3,422
4	19	.234	14/64	12	2.10	3,807
2	19	.296	14/64	10	2.28	4,835
1	37	.333	14/64	10	2.37	5,215
1/0	37	.374	14/64	10	2.46	5,654
2/0	37	.420	11/64	10	2.55	6,174
3/0	37	.471	14/64	10	2.66	6,806
4/0	37	.533	14/64	10	2.79	7,547
C.M.						
250,000	61	.576	14/64	10	2.89	8,237
500,000	61	.815	14/64	8	3.50	13,011
1,000,000	91	1.153	14/64	8	4.21	20,068

The above data are approximate and subject to normal manufacturing tolerances.

SERIES STREET LIGHTING UNDERGROUND CABLE

0-10,000 VOLTS

For underground installation either in ducts or directly in the earth. Supplied in a variety of types.

The usual sizes are 8 and 6 A.W.G., although other sizes can be furnished if required.

Conductors for all types are tinned, soft or annealed copper, usually solid, and comply with all requirements of A.S.T.M. Specifications.

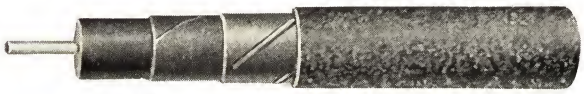
LEAD SHEATHED PARKWAY CABLE



Insulated with A.S.T.M. Performance compound to standard thicknesses and enclosed in a lead sheath over which protective coverings may be applied.

Open Circuit Voltage	Size A.W.G.	Insulation Thick. In.	Lead Sheath Thick. In.	Lead Sheathed: Overall Dia. In.	Lead Sheathed: Net Wt. Lb. per 1000 Ft.	Lead With Two Jute Servings: Overall Dia. In.	Lead With Two Jute Servings: Net Wt. Lb per 1000 Ft.	Lead With Jute, Double Steel Tape Armor, Jute Overall: Overall Dia. In.	Lead With Jute, Double Steel Tape Armor, Jute Overall: Net Wt. Lb. per 1000 Ft.
4001–6000	8	10/64	4/64	.60	679	.76	764	.95	1118
	6	10/64	4/64	.63	754	.79	853	.98	1220
7001–8000	8	12/64	4/64	.66	774	.82	875	1.01	1267
	6	12/64	4/64	.69	852	.85	962	1.04	1368

COMPOUND-SHEATHED CABLE



For use either in ducts or directly in the earth. Conductors are insulated with A.S.T.M. Performance compound.

Type	Installation	Maximum Open Circuit Voltage	Additional Coverings
A	In Ducts	6000	Duck Tape
B	In Earth	3000	Fibrous Armor, Caulk, Duck Tape
C	In Ducts	10000	Semi-conducting Tape, Drain Wires, Duck Tape
D	In Earth	10000	Semi-conducting Tape, Drain Wires, Fibrous Armor, Caulk, Duck Tape

Open Circuit Volts	Size A.W.G.	Insulation Thickness, Inches: Rubber	Thiokol	Total	Type A Duct Installation: Overall Diam. In.	Type A Duct Installation: Net Wt. Lb. per 1000 Ft.	Type B Earth Installaton: Overall Diam. In.	Type B Earth Installaton: Net Wt. Lb. per 1000 Ft.
0–600	8	3/64	2/64	5/64	.38	116	.46	129
	6	3/64	2/64	5/64	.42	145	.50	168
2001–3000	8	6/64	2/64	8/64	.48	159	.56	172
	6	7/64	2/64	9/64	.55	207	.63	232
					Type A		Type D	
4001–6000	8	9/64	2/64	11/64	.57	210	.68	232
	6	9/64	2/64	11/64	.61	240	.72	279
					Type C		Type D	
7001–8000	8	11/64	2/64	13/64	.67	254	.75	275
	6	11/64	2/64	13/64	.70	287	.78	321

Construction data for cables of other sizes and voltage ratings will be supplied on request.

The above data are approximate and subject to normal manufacturing tolerances.

SERIES STREET LIGHTING UNDERGROUND CABLE

0-10,000 VOLTS

RUBBER SHEATHED TYPE CABLE



Non-leaded series street lighting cable is supplied either for duct installation or for direct earth installation. Suitable for this type of service because of its high dielectric strength and corona resistance.

Concentric types for series street lighting cable have an inner insulated conductor and an outer uninsulated conductor, the latter serving as a shield.

RUBBER INSULATED ORNAMENTAL POLE AND BRACKET CABLE

0-10,000 VOLTS

Used for interior wiring of ornamental poles which are fed by underground cable, or for the exterior wiring of pole type bracket fixtures.

Standard package, 1000 feet on reel unless otherwise ordered.

TWIN TYPE

Two insulated and braided conductors laid parallel and enclosed in overall tape and braid. Saturated and filled with weatherproof compound and coated with special arc cable finishing compound.

Open Circuit Trans. Voltage	Cond. Size A.W.G.	Cond. No. Str.	Insulation Thickness, Inches: On Cond.	Belt	Total	Major Overall Diam. In.	Net Wt. Lb. per 1000 Ft.
0–600	10	19	3/64	.....	3/64	.57	198
	8	37	4/64	.....	4/64	.69	260
	6	37	4/64	.....	4/64	.77	293
2001–3000	10	19	6/64	.....	6/64	.75	234
	8	37	6/64	.....	6/64	.82	291
	6	37	7/64	.....	7/64	.97	330
3001–4000	10	19	7/64	.....	7/64	.82	243
	8	37	7/64	.....	7/64	.88	302
	6	37	8/64	.....	8/64	1.03	351

TWIN BELTED TYPE



Two insulated and braided conductors laid parallel, enclosed in a close-fitting belt of insulating compound and covered with an overall tape and braid. The overall braid is saturated and filled with weatherproof compound and coated with special arc cable finishing compound.

The maximum permissible voltage between conductors is 600 volts.

4001–6000	10	19	3/64	6/64	9/64	.76	256
	8	37	3/64	6/64	9/64	.82	320
	6	37	4/64	5/64	9/64	.95	377
7001–9000	10	19	3/64	8/64	11/64	.82	280
	8	37	3/64	8/64	11/64	.90	352
	6	37	4/64	7/64	11/64	1.01	427
9001–10000	10	19	3/64	9/64	12/64	.86	292
	8	37	3/64	9/64	12/64	.93	368
	6	37	4/64	8/64	12/64	1.04	431

The above data are approximate and subject to normal manufacturing tolerances.

RUBBER-INSULATED TREE WIRE

0-8000 VOLTS

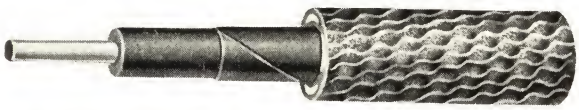
Tree wire constructions consist of a rubber-insulated conductor having fibrous coverings or non-metallic sheath to withstand the abrasive action of tree limbs.

A.S.A. TYPE



Has tinned, medium-hard, solid-copper conductors for No. 4 A.W.G. and smaller; stranded for larger sizes. Insulation, A.S.T.M. Performance grade rubber compound. Tape and hawser cord braid coverings. Saturant is of special synthetic compound. Pitch and mica finish.

LOOM-WOVEN



A loom-woven tree wire having an abrasion resistance twice that of the A.S.A. type. Has tinned, medium hard, solid copper conductors for No. 4 A.W.G. and smaller; stranded for larger sizes. Insulation, tree wire compound. Tape and heavy, specially-constructed loom coverings of hard-twisted paper twine and cotton cord. Saturant is of special synthetic compound. Pitch and mica finish.

FIBER-ARMORED



An excellent tree wire, having, in addition to the superior electrical qualities of tree wire compound, a high degree of abrasion resistance. Has tinned, medium hard, solid copper conductors for No. 4 A.W.G. and smaller; stranded for larger sizes. Insulation, tree wire compound. Tape, rawhide fiber armor covering not less than .035 inch in thickness, and closely-woven hawser cord braid. Saturant is of special synthetic compound. Pitch and mica finish.

Special Thicknesses of Insulation

Supported on Insulators—(N.E.M.A.)

Power Circuits				Series Street Lighting Circuits			
		Insulation Thickness —In.—			Insulation Thickness		
Rated Voltage Phase to Phase	Conductor Size A.W.G.	Grd. Neutral Cir.	Ungrd. Neutral Cir.	Open Circuit Voltage	Conductor Size A.W.G.	—In.— Without Protectors	With Protectors
0–600	10	3/64	3/64	0–600	8–4	4/64	4/64
	8–2	4/64	4/64		.....	....	....
	1–4/0	5/64	5/64		.....	....	....
601–1000	8	4/64	4/64	601–1000	8	4/64	4/64
	7–4/0	5/64	5/64		7–4	5/64	4/64
1001–5000	8–4/0	5/64	5/64	1001–5000	8–4	5/64	5/64
5001–6000	8–4/0	6/64	8/64	5001–6000	8–4	6/64	5/64
6001–7000	8–4/0	7/64	....	6001–7000	8–4	7/64	6/64
7001–8000	8–4/0	8/64	....	7001–8000	8–4	8/64	7/64

When installed without insulators, insulation thicknesses must be in accordance with the standards for series street lighting cables and power cables. If the voltage exceeds 2000 volts on tree wire installed without insulators, shielding recommendations should be obtained.

The above data are approximate and subject to normal manufacturing tolerances.

RUBBER-INSULATED TRAFFIC-CONTROL OR SIGNAL CABLE

600 VOLTS



Braid Finished



Lead Sheathed

Suitable for general application in control circuits rated at 600 volts or less.

Braid Finished. Recommended for general application, particularly in aerial circuits, and for inside use in conduit where not subject to immersion.

Lead Sheathed. Recommended for service in underground ducts or in locations where cable is subject to either continuous or intermittent immersion in water.

Standard conductors are solid, tinned copper, insulated with 3/64-inch N.E.C. insulation covered with N.E.M.A. color–coded braids.

Standard I.P.C.E.A. Parkway cable finish can be supplied over the lead sheath on cables to be used for direct earth installation.

Shipped on reels containing 1000 feet.

Size A.W.G.	No.	Braid Finished: Overall Diam. In.	Braid Finished: Wt.,Lb. Per 1000 Feet Net	Braid Finished: Wt.,Lb. Per 1000 Feet Ship.	Lead Sheathed: Sheath Thickness In.	Lead Sheathed: Overall Diam. In.	Lead Sheathed: Wt.,Lb. Per 1000 Feet Net	Lead Sheathed: Wt.,Lb. Per 1000 Feet Ship.
Diam. of Conductors, .06408 Inch								
14	2	.41x.22	61	83	3/64	.48x.29	315	394
14	3	.50	117	170	4/64	.57	592	685
14	4	.55	148	203	4/64	.62	667	783
14	5	.60	184	233	4/64	.67	752	868
14	6	.66	217	269	4/64	.73	839	1144
14	7	.66	226	277	4/64	.73	847	1152
14	8	.72	256	323	4/64	.78	929	1234
14	9	.78	285	351	5/64	.87	1222	1608
14	10	.87	336	527	5/64	.94	1355	1741
14	12	.90	388	576	5/64	.97	1438	1824
Diam. of Conductors, .08081 Inch								
12	2	.44x.24	81	133	3/64	.52x.31	352	431
12	3	.53	153	204	4/64	.60	657	750
12	4	.60	194	247	4/64	.66	757	850
12	5	.65	238	288	4/64	.72	846	962
12	6	.71	283	349	4/64	.78	948	1253
12	7	.71	298	363	4/64	.78	962	1267
12	8	.77	338	529	5/64	.87	1268	1573
12	9	.84	378	567	5/64	.93	1380	1685
12	10	.93	442	627	5/64	1.01	1532	1918
12	12	.97	513	694	5/64	1.04	1637	2023
Diam. of Conductors, .1019 Inch								
10	2	.48x.26	115	134	4/64	.59x.36	524	603
10	3	.58	203	251	4/64	.65	747	840
10	4	.64	259	308	4/64	.71	856	972
10	5	.71	319	383	4/64	.77	975	1091
10	6	.77	380	440	5/64	.87	1308	1613
10	7	.77	422	458	5/64	.87	1348	1653
10	8	.84	461	645	5/64	.94	1466	1771
10	9	.93	524	704	5/64	1.01	1601	1987
10	10	1.02	598	774	5/64	1.10	1779	2165
10	12	1.05	700	780	5/64	1.13	1915	2301

The above data are approximate and subject to normal manufacturing tolerances.

RUBBER INSULATED CONTROL CABLE

600 VOLTS



Designed for direct earth installation. The non-metallic armoring is of the fibrous type which has been used on trench cable for many years. This sheath results in a lightweight cable which is easy to splice and to terminate, and which is free from trouble due to electrolysis.

Conductors are insulated with $\frac{3}{64}$-inch compound which is highly resistant to water and earth solutions.

A color-coded cotton braid is applied on each conductor.

The taped assembly is provided with a moisture seal of asbestos base caulk, a heavy saturated asbestos braid, a second layer of caulk, pretreated fibrous armor tape, a third layer of caulk, and a heavy presaturated duck tape.

Cable is finished with pitch and mica to provide a non-tacky surface.

A variation in the regular trench underground finish can be supplied when a control cable is desired for underground, aerial, and duct (universal) service.

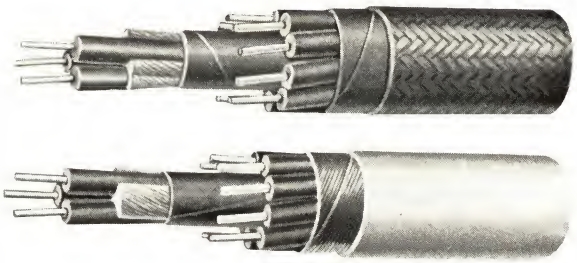
Shipped on reels containing 1000 feet.

Nominal Size A.W.G.	No.	Construction	Diameter Inches	Overall Diameter Inches	Weight, Pounds Per 1000 Feet Net	Weight, Pounds Per 1000 Feet Shipping
14	2	19/#27	.0710	.796	239	519
14	3	19/#27	.0710	.827	275	555
14	4	19/#27	.0710	.878	331	611
14	5	19/#27	.0710	.935	373	653
14	6	19/#27	.0710	.994	413	693
14	7	19/#27	.0710	.994	438	718
14	8	19/#27	.0710	1.054	494	865
14	9	19/#27	.0710	1.114	555	926
14	10	19/#27	.0710	1.192	605	976
14	12	19/#27	.0710	1.223	674	1045
12	2	19/#25	.0895	.828	293	573
12	3	19/#25	.0895	.861	339	619
12	4	19/#25	.0895	.917	407	687
12	5	19/#25	.0895	.978	469	748
12	6	19/#25	.0895	1.042	527	898
12	7	19/#25	.0895	1.042	559	930
12	8	19/#25	.0895	1.107	637	1008
12	9	19/#25	.0895	1.173	699	1070
12	10	19/#25	.0895	1.256	766	1137
12	12	19/#25	.0895	1.289	855	1226
9	2	19/#22	.1267	.839	367	647
9	3	19/#22	.1267	.878	451	731
9	4	19/#22	.1267	.943	556	836
9	5	19/#22	.1267	1.015	646	1017
9	6	19/#22	.1267	1.090	733	1104
9	7	19/#22	.1267	1.090	791	1162
9	8	19/#22	.1267	1.167	896	1267
9	9	19/#22	.1267	1.243	988	1357
9	10	19/#22	.1267	1.372	1146	1517
9	12	19/#22	.1267	1.411	1291	1662

The above data are approximate and subject to normal manufacturing tolerances.

FIRE ALARM, POLICE SIGNAL, AND MUNICIPAL SIGNAL CABLE

600 VOLTS



For general service in fire alarm, police signal, and other municipal signal systems.

Constructed with many combinations of conductors and pairs. Designed with suitable overall coverings for underground, aerial, or inside use.

May be made to conform to various specifications, but the Specifications and Operating Standards of the International Municipal Signal Association, Inc., are most generally accepted and followed unless otherwise specified.

This cable is standard in the following forms:

(1) Rubber insulated, lead sheathed multiple conductor signal cable for general use in underground ducts, aerial use with messenger or in stations and buildings.

(2) Rubber insulated, lead sheathed and armored multiple conductor Parkway signal cable for general use installed directly in the earth without conduit protection.

(3) Rubber insulated, heavy braid or loom-covered multiple conductor signal cable for aerial use with messenger or for conduit and duct installations.

(4) Rubber insulated, braid-covered single conductor signal wire for general use in stations, boxes, etc.

(5) Rubber insulated, 2-conductor, twisted or parallel outside telephone drop wire.

Variable Construction Features

Conductors. All conductors are tinned copper in accordance with American Standards Association Specifications.

Insulation. The insulation is high-grade, heat-resisting, long-life rubber compound. Other grades such as A.S.T.M. Class AO can be supplied if requested. The thicknesses of insulation are standard for operation at 600 volts or less.

Braids. Saturated braids, either color-coded or plain will be furnished on the individual conductors only when specified by the purchaser.

Assembly. Multiple conductor assemblies are laid up symmetrically in layers in round form, jute fillers being used where necessary. Tracer conductors are included in each layer for identification purposes. A tape is applied over the core.

Lead Sheath. The sheath of non-armored cable is a lead-tin alloy containing approx. 2% tin.

The sheath of armored cable is commercially pure lead without alloy.

The above data are approximate and subject to normal manufacturing tolerances.

RUBBER SHEATH CABLE

2-CONDUCTOR ROUND TYPE—600 VOLTS

Used for general power supply purposes for motors and various types of portable equipment.



Conductors A.W. G.	Conductors Construction	Current Carrying Cap. Amp.	Insulation Thickness In.	Overall Diam. In.	Wt. Lb. per 1000 Ft.	Shpg. Wt., Pounds 250-Ft. Coils	Shpg. Wt., Pounds 500-Ft. Reels	Shpg. Wt., Pounds 1000-Ft. Reels
8	49/#25	40	4/64	.85	355	90	260	575
6	49/#23	50	4/64	.95	480	120	325	700
6	133/#27	50	4/64	.95	490	123	330	710
4	49/#21	70	4/64	1.10	675	169	557	1070
4	133/#25	70	4/64	1.15	735	184	587	1135
3	49/#20	80	4/64	1.25	885	222	662	1285
3	133/#24	80	4/64	1.25	885	222	662	1285
2	133/#23	95	4/64	1.30	1000	250	780	1400
2	259/#26	95	4/64	1.30	1000	250	780	1400
1	133/#22	110	5/64	1.50	1300	325	1050	1750
1	259/#25	110	5/64	1.50	1300	325	1050	1750



1/0	133/#21	130	5/64	1.60	1520	.....	1160	1970
1/0	259/#24	130	5/64	1.60	1520	.....	1160	1970
2/0	133/#20	150	5/64	1.70	1810	.....	1305	2260
2/0	259/#23	150	5/64	1.70	1810	.....	1305	2260
3/0	259/#22	175	5/64	1.80	2120	.....	1460	2570
3/0	427/#24	175	5/64	1.80	2120	.....	1460	2570
4/0	427/#24	175	5/64	2.00	2630	.....	1765	3285
4/0	427/#23	200	5/64	2.00	2630	.....	1765	3285

Cables of larger sizes up to and including 500 MCM can also be furnished.

3-CONDUCTOR—600 VOLTS



Conductors Size A.W. G.	Conductors Construction	Current Carrying Cap. Amp.	Insulation Thickness In.	Overall Diam. In.	TYPE W Without Ground Wires: Net Wt. Lb. per 1000 Ft.	TYPE W Without Ground Wires: Shpg. Wt., Pounds 500-Ft. Reels	TYPE W Without Ground Wires: Shpg. Wt., Pounds 1000-Ft. Reels	TYPE G With Ground Wires: Ground Wire Construction	TYPE G With Ground Wires: Add. Cable Wt. Lb. per 1000 Ft.
8	49/#25	35	4/64	.95	485	325	700	3x 49/#31	40
6	49/#23	50	4/64	1.10	700	570	1100	3x 49/#29	60
6	133/#27	50	4/64	1.10	710	575	1110	3x 49/#29	60
4	49/#21	65	4/64	1.20	910	675	1300	3x133/#31	100
4	133/#25	65	4/64	1.20	935	687	1335	3x133/#31	100
3	49/#20	75	4/64	1.30	1120	840	1520	3x133/#30	125
3	133/#24	75	4/64	1.30	1120	840	1520	3x133/#30	125
2	133/#23	90	4/64	1.40	1345	950	1745	3x133/#29	155
2	259/#26	90	4/64	1.40	1345	950	1745	3x133/#29	155
1	133/#22	100	5/64	1.60	1700	1250	2150	3x133/#28	195
1	259/#25	100	5/64	1.60	1700	1250	2150	3x133/#28	195



1/0	133/#21	120	5/64	1.70	1900	1395	2440	3x133/#27	250
1/0	259/#24	120	5/64	1.70	1990	1395	2440	3x133/#27	250
2/0	133/#20	135	5/64	1.80	2385	1592	2820	3x133/#26	315
2/0	259/#23	135	5/64	1.80	2385	1592	2820	3x133/#26	315
3/0	259/#22	155	5/64	2.00	2840	1870	3490	3x133/#25	395
3/0	427/#24	155	5/64	2.00	2840	1870	3490	3x133/#25	395
4/0	259/#21	180	5/64	2.10	3480	2190	4130	3x133/#24	495
4/0	427/#23	180	5/64	2.10	3480	2190	4130	3x133/#24	495

Cables of larger sizes up to and including 400 MCM can also be furnished.

For Type G cables, weights can be approximated by using the last column for adjustment.

4-CONDUCTOR—600 VOLTS



Conductors Size A.W. G.	Conductors Construction	Current Carrying Cap. Amp.	Insulation Thickness In.	Overall Diam. In.	TYPE W Without Ground Wires: Net Wt. Lb. per 1000 Ft.	TYPE W Without Ground Wires: Shpg. Wt., Pounds 500-Ft. Reels	TYPE W Without Ground Wires: Shpg. Wt., Pounds 1000-Ft. Reels	TYPE G With Ground Wires: Ground Wire Construction	TYPE G With Ground Wires: Add. Cable Wt. Lb. per 1000 Ft.
8	49/#25	30	4/64	1.05	610	525	1000	4x 45/#32	35
6	49/#23	40	4/64	1.15	800	620	1200	4x 49/#30	55
6	133/#27	40	4/64	1.20	860	650	1260	4x 49/#30	55
4	49/#21	55	4/64	1.30	1100	770	1500	4x 49/#28	90
4	133/#25	55	4/64	1.40	1240	900	1640	4x 49/#28	90
3	49/#20	65	4/64	1.50	1465	1137	1925	4x133/#31	120
3	133/#24	65	4/64	1.50	1465	1137	1925	4x133/#31	120
2	133/#23	75	4/64	1.60	1740	1270	2190	4x133/#30	150
2	259/#26	75	4/64	1.60	1740	1270	2190	4x133/#30	150
1	133/#22	85	5/64	1.80	2160	1480	2610	4x133/#29	190
1	259/#25	85	5/64	1.80	2160	1480	2610	4x133/#29	190



1/0	133/#21	100	5/64	1.90	2540	1670	2990	4x133/#28	240
1/0	259/#24	100	5/64	1.90	2540	1670	2990	4x133/#28	240
2/0	133/#20	115	5/64	2.00	2985	1942	3630	4x133/#27	300
2/0	259/#23	115	5/64	2.00	2985	1942	3630	4x133/#27	300
3/0	259/#22	130	5/64	2.20	3695	2300	4345	4x133/#26	380
3/0	427/#24	130	5/64	2.20	3695	2300	4345	4x133/#26	380
4/0	259/#21	150	5/64	2.40	4510	2730	5160	4x133/#25	480
4/0	427/#23	150	5/64	2.40	4510	2730	5160	4x133/#25	480

Cables of larger sizes up to and including 300 MCM can also be furnished.

For Type G cables, weights can be approximated by using the last column for adjustment.

The above data are approximate and subject to normal manufacturing tolerances.

WELDING CABLE



This cable possesses an overall protective jacket of exceedingly tough, resilient rubber compound especially designed to withstand severe service and yet remain flexible. Complies with I.P.E.C.A. standard requirements.

Exceptional flexibility is obtained by the use of a large number of extremely fine bare copper wires, rope stranded.

Coils easily, lies flat, does not kink or tangle. May be dragged through puddles and subjected to all kinds of hard usage in damp places.

Conductors Size A.W.G.	Conductors Construction	Overall Diam. In.	Current Carrying Cap. Amp.	Net Wt. Lb. per 1000 Feet	Shipping Wt., Lbs. 500-Ft. Reels	Shipping Wt., Lbs. 1000-Ft. Reels
8	420/#34	.390	50	135	.....	195
6	686/#34	.400	75	155	.....	215
4	1078/#34	.495	100	220	.....	280
3	1323/#34	.500	150	245	.....	305
2	1666/#34	.560	200	310	.....	375
1	2107/#34	.625	250	390	.....	485
1/0	2646/#34	.675	300	475	.....	570
2/0	3332/#34	.750	375	570	.....	670
3/0	4263/#34	.815	450	710	.....	820
4/0	5341/#34	.900	550	885	.....	995
MCM						
250	6384/#34	.950	600	1010	600	.....
300	7581/#34	1.030	650	1245	720	.....

GROUNDING CABLE



Extensively used for temporary grounding of transmission lines of all voltages to 132,000 volts.

Ground clamp with cable attached is hooked on the line by means of a grounding stick, the other end having previously been connected to ground by clamping to transmission tower or when working on a pole, to any temporary ground connection available. This cable also is used in generating stations and substations for grounding apparatus during repairs.

Conductors Size A.W.G.	Conductors Construction	Current Carrying Cap. Amp.	Overall Diam. In.	Net Wt. Lb. per 1000 Feet	Shipping Wts. Pounds 250-Ft. Coils	Shipping Wts. Pounds 500-Ft. Reels	Shipping Wts. Pounds 1000-Ft. Reels
6	133/#27	60	.625	225	57	180	290
4	133/#25	85	.675	289	73	210	400
3	133/#24	95	.750	359	90	245	470
2	133/#23	110	.750	395	99	265	505
1	133/#22	130	.800	479	120	305	730
1/0	259/#24	150	.850	545	137	388	795
2/0	259/#23	175	.900	650	188	490	900
3/0	259/#22	205	1.000	809	203	520	1060
4/0	259/#21	235	1.050	959	240	595	1320

The above data are approximate and subject to normal manufacturing tolerances.

MINING MACHINE CABLE

2-CONDUCTOR CONCENTRIC TYPE 600 VOLTS

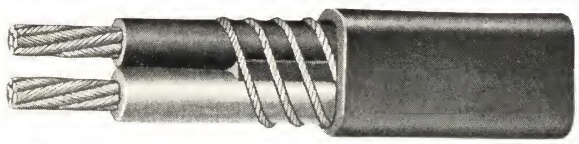


Used almost exclusively in mines on cutting machines, gathering locomotives, shuttle cars, and other mine equipment, and are designed to have a maximum flexibility for this type of cable. The strands of the concentric conductor, are laid helically, to provide full coverage over the taped inner core. Over this is a layer of insulation covered by a cord braid or severe reinforcement and tough rubber compound jacket.

Conductors Size A.W.G.	Conductors Construction	Current Carrying Cap. Amp.	Insulation Thickness In.	Concentric Conductor Construction	Overall Diam. in.	Net Wt. Lb. per 1000 Feet	Shpg. Wt. Pounds 250-Foot Coils	Shpg. Wt. Pounds 500-Foot Reels	Shpg. Wt. Pounds 1000-Foot Reels
6	49/#23	50	6/64	40/#22	.75	396	98	255	468
6	133/#27	50	6/64	40/#22	.75	396	98	255	468
4	49/#21	65	6/64	40/#20	.85	550	138	351	746
4	133/#25	65	6/64	40/#20	.85	550	138	351	746
3	49/#20	75	6/64	40/#19	.90	620	155	396	836
3	133/#24	75	6/64	40/#19	.90	620	155	396	836
2	133/#23	90	6/64	40/#18	.95	756	188	458	966
2	259/#26	90	6/64	40/#18	.95	756	188	458	966
1	133/#22	100	7/64	40/#17	1.00	890	222	531	1140
1	259/#25	100	7/64	40/#17	1.00	890	222	531	1140

Cables of larger sizes, up to and including 4/0 A.W.G. also can be supplied.

2-CONDUCTOR PARALLEL DUPLEX TYPE 600 VOLTS



Made in conformity with requirements of U. S. Bureau of Mines for use on explosion-proof equipment. Used in mines on cutting machines, as a battery charging cable, and for other general uses requiring a 2-conductor all-rubber cable.

Conductors are enclosed in and surrounded by a solid compact mass of rubber which prevents kinking.

Insulated with rubber compound. Identified by rubber of different colors, i.e., black and white. Conductors are laid parallel with rubber fillers in lateral interstices, and covered with a sheath of rubber. A strong reinforcing cord directly under jacket strengthens cable and opposes kinking. Easy to splice.

Conductors Size A.W.G.	Conductors Construction	Current Carrying Cap. Amp.	Insulation Thickness In	Overall Diam. In.	Net Wt. Lb. per 1000 Feet	Shpg. Wt., Pounds 250-Foot Coils	Shpg. Wt., Pounds 500-Foot Reels	Shpg. Wt., Pounds 1000-Foot Reels
8	49/#25	40	4/64	.531x .812	275	69	197	355
6	49/#23	50	4/64	.575x .950	380	95	250	456
6	133/#27	50	4/64	.575x .950	380	95	250	456
4	49/#21	70	4/64	.625x1.000	510	128	334	712
4	133/#25	70	4/64	.625x1.000	535	134	345	740
3	49/#20	80	4/64	.675x1.109	636	159	397	838
3	133/#24	80	4/64	.675x1.109	636	159	397	838
2	133/#23	95	4/64	.750x1.250	790	197	474	992
2	259/#26	95	4/64	.750x1.250	790	197	474	992
1	133#/22	110	5/64	.812x1.421	992	248	590	1280
1	259/#25	110	5/64	.812x1.421	992	248	590	1280

Cables of larger sizes up to and including 4/0 AWG can also be furnished.

The above data are approximate and subject to normal manufacturing tolerances.

FLEXIBLE CABLE

SINGLE-CONDUCTOR—600 VOLTS



Designed for general portable power supply service whenever a heavy-duty flexible cable is required. Specific uses, especially in the smaller conductor sizes, are for gathering-reel-locomotives in mines. For motor lead use, this cable can be supplied with a paper separator over the conductor.

Conductors Size A.W.G.	Conductors Construction	Current Carrying Cap. Amp.	Insulation Thickness In.	Overall Diam. In.	Shipping Weight, Pounds — Coils 250 Ft.	Coils 500 Ft.	Reels 500 Ft.	Reels 1000 Ft.
8	49/#25	45	4/64	.400	29	58	86	166
6	49/#23	60	4/64	.500	45	91	143	244
6	133/#27	60	4/64	.500	45	90	142	240
4	49/#21	85	4/64	.562	61	122	175	308
4	133/#25	85	4/64	.562	62	123	175	308
3	49/#20	95	4/64	.625	72	143	208	359
3	133/#24	95	4/64	.625	77	153	218	367
2	133/#23	110	4/64	.675	93	185	250	483
2	259/#26	110	4/64	.675	91	182	250	483
1	133/#22	130	5/64	.75	103	206	272	500
1	259/#25	130	5/64	.75	107	214	274	507
1/0	133/#21	150	5/64	.75	125	250	320	595
1/0	259/#24	150	5/64	.75	125	250	320	595
2/0	133/#20	175	5/64	.80	152	304	372	895
2/0	259/#23	175	5/64	.80	152	304	372	895
3/0	259/#22	205	5/64	.90	186	372	440	1025
3/0	427/#24	205	5/64	.90	186	372	440	1025
4/0	259/#21	235	5/64	.95	225	450	537	1180
4/0	427/#23	235	5/64	.95	225	450	537	1180
C.M.								
250,000	259/.0312"	275	6/64	1.05	.....	.....	720	1305
250,000	427/.0243"	275	6/64	1.05	.....	.....	720	1305
300,000	259/.034"	305	6/64	1.10	.....	.....	800	1480
300,000	427/.0265"	305	6/64	1.10	.....	.....	800	1480
350,000	259/.037"	345	6/64	1.15	.....	.....	880	1640
350,000	427/.0285"	345	6/64	1.15	.....	.....	880	1640
400,000	427/.0312"	375	6/64	1.20	.....	.....	990	1890
400,000	259/.0395"	375	6/64	1.20	.....	.....	990	1890
450,000	259/.042"	400	6/64	1.25	.....	.....	1080	2020
450,000	427/.032"	400	6/64	1.25	.....	.....	1080	2020
500,000	259/.044"	425	6/64	1.30	.....	.....	1200	2260
500,000	427/.035"	425	6/64	1.30	.....	.....	1200	2260
550,000	259/.046"	450	7/64	1.40	.....	.....	1310	2470
550,000	427/.036"	450	7/64	1.40	.....	.....	1310	2470
600,000	250/.048"	475	7/64	1.50	.....	.....	1440	2832
600,000	427/.038"	475	7/64	1.50	.....	.....	1440	2832
650,000	259/.0508"	495	7/64	1.50	.....	.....	1505	2962
650,000	427/.039"	495	7/64	1.50	.....	.....	1505	2962
700,000	427/.0403"	520	7/64	1.60	.....	.....	1610	3172
700,000	637/.033"	520	7/64	1.60	.....	.....	1610	3172
750,000	427/.042"	540	7/64	1.60	.....	.....	1680	3312
750,000	637/.034"	540	7/64	1.60	.....	.....	1680	3312

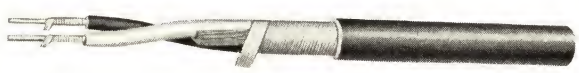
Cables of larger sizes can also be furnished.

Sizes 4, 3, and 2 A.W.G. single-conductor cable are made with a spider web braid of heavy single end cotton between inner insulating rubber and outer jacket to serve the special requirements of cables used on gathering reel locomotives in coal mines. All other sizes have helical winds.

The above data are approximate and subject to normal manufacturing tolerances.

FLEXIBLE HEAVY-DUTY CORDS

TYPE S AND SO—600 VOLTS



Flexible stranded conductors of annealed copper, tin-coated or fibre-separated from rubber or synthetic insulation, cabled together with soft jute or cotton reinforcement. Jacketed in natural or synthetic rubber. Type SO is oil resistant.

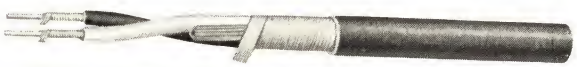
Color coding of conductors; insulation colors—black; or black and white; or black, white, and green; or black; white, green, and red — for single, two, three, or four conductor cords respectively.

Conductors Size A.W.G.	Conductors Construction	Current Carrying Cap. Amp.	Insulation Thickness In.	Overall Diameter In.	Net Weight Pounds per 1000 Feet	Gross Wt. Lbs. Per 1000 Ft. 500-Foot Spool	Gross Wt. Lbs. Per 1000 Ft. 1000-Foot Reel
Single Conductor							
18	42x#34	7	2/64	.300	46	50	74
16	65x#34	10	2/64	.300	48	52	76
14	41x#30	15	3/64	.300	52	56	78
12	65x#30	20	3/64	.300	58	62	85
10	105x#30	25	3/64	.300	70	74	100
2-Conductor							
18	42x#34	7	2/64	.400	76	86	.....
16	65x#34	10	2/64	.400	81	91	.....
14	41x#30	15	3/64	.530	139	.....	197
12	65x#30	20	3/64	.605	184	.....	242
10	105x#30	25	3/64	.640	207	.....	265
3-Conductor							
18	42x#34	7	2/64	.400	84	94	.....
16	65x#34	10	2/64	.435	104	114	.....
14	41x#30	15	3/64	.562	172	.....	230
12	65x#30	20	3/64	.640	224	.....	288
10	105x#30	25	3/64	.690	288	.....	396
4-Conductor							
18	42x#34	5.6	2/64	.435	101	.....	159
16	65x#34	8	2/64	.485	131	.....	189
14	41x#30	12	3/64	.605	206	.....	270
12	65x#30	16	3/64	.675	254	.....	362
10	105x#30	20	3/64	.750	355	.....	463

Single-conductor cords not listed as Type S cord.

FLEXIBLE LIGHT-DUTY CORDS

TYPE SJ AND SJO—300 VOLTS



Same construction and color coding as Type S and SO Cords. Type SJO is oil resistant.

Conductors Size A.W.G.	Conductors Construction	Current Carrying Cap. Amp.	Insulation Thick. In.	Overall Diam. In.	No. of 250-Ft. Coils in Ctn.	Wt.Lb. per 250-Ft. Coil	Shpg. Wt.Lb. per Ctn
2-Conductor							
18	42x#34	7	2/64	.305	4	12	47
16	66x#34	10	2/64	.330	4	15	60
3-Conductor							
18	42x#34	7	2/64	.335	4	15	62
16	66x#34	10	2/64	.360	4	20	82
4-Conductor							
18	42x#34	5.6	2/64	.360	4	21	84
16	66x#34	8	2/64	.390	4	26	107

These cords (except 2-conductor size 18 A.W.G.) bear printed colored labels vulcanized into sheath.

The above data are approximate and subject to normal manufacturing tolerances.

FLEXIBLE CORDS

TYPE C TWISTED PAIR FLEXIBLE LAMP CORD

300 AND 600 VOLTS



For pendant use in dry places where not subject to hard usage.

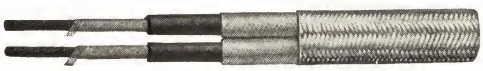
Made in either Rayon, Glos or cotton finish. Flexibility is assured by the use of a number of very fine, soft, copper wires in each of the two conductors. Each strand is covered with a close wrap of strong cotton as a protection against any chemical action, and is then insulated with a seamless resilient good grade rubber compound.

Size A.W.G.	Construction	Insulation Thickness Inches	Current Carrying Cap., Amps.	Approx. Overall Diam. Inches	Approx. Net Wt. Lb. Per 1000 Ft.	Approx. Gross Wt. Lb. Per 1000 Ft.
‡**18	16/#30	1/64	5	.225	17	22
‡18	16/#30	2/64	5	.295	25	30
‡**16	26/#30	1/64	7	.250	25	30
‡16	26/#30	2/64	7	.320	33	38
‡‡14	41/#30	3/64	15	.410	56	59
‡‡12	65/#30	3/64	20	.450	76	79
‡‡10	104/#30	3/64	25	.500	105	110

Construction: Two type FF fixture wires twisted together.

TYPE PO PARALLEL FLEXIBLE LAMP CORD

300 AND 600 VOLTS



For use on portable lamps only, where not subject to hard usage.

This cord is made in either Glos or cotton finish. Each of the two copper conductors consists of a number of very fine, soft copper wires—assuring flexibility. A close wrap of strong cotton is next applied to each strand to protect it from any chemical action. The individual conductors are then insulated with a seamless, resilient, good grade of rubber compound, and soft cotton of a color similar to the outside is braided over each. After this the two conductors are laid parallel and an outer covering of Glos, or fine quality cotton, tightly and smoothly braided around the pair.

Size A.W.G.	Construction	Insulation Thickness Inches	Current Carrying Cap., Amps.	Approx. Overall Diam. Inches	Approx. Net Wt. Lb. Per 1000 Ft.	Approx. Gross Wt. Lb. Per 1000 Ft.
‡18	16/#30	1/64	5	.255	19	22
‡18	16/#30	2/64	5	.320	28	31
‡**16	26/#30	1/64	7	.285	27	30
‡16	26/#30	2/64	7	.345	37	41
‡‡14	41/#30	3/64	15	.440	60	64
‡‡12	65/#30	3/64	20	.480	79	83
‡‡10	104/#30	3/64	25	.525	110	115

**Not listed by Underwriters.

‡Rated 300 Volts.

‡‡Rated 600 Volts.

The above data are approximate and subject to normal manufacturing tolerances.

FLEXIBLE CORDS

TYPE POSJ MID-RIP CORD

300 VOLTS



Parallel all-rubber cord in which the insulation of the conductors is integral with the rubber jacket. Nearly invisible slits in the jacket permit easy separation of the two insulated conductors without the use of tools for the purpose of making connections. Conductors are extra-flexible, bunch stranded soft annealed copper, covered by colored separators, and imbedded in a 40 per cent tough rubber compound.

Size A.W.G.	Construction	Thickness, Inches	Current Carrying Cap., Amps.	Approx. Overall Diam. Inches	Approx. Net Wt. Lb. Per 1000 Ft.	Approx. Gross Wt. Lb. Per 1000 Ft
18	41/#34	1/64	7	.235x.130	26	34
18	41/#34	2/64	7	.290x.160	36	43
16	65/#34	2/64	10	.315x.185	43	52

STYLE HPD HEATER CORD

300 VOLTS



For use in connection with all types of portable heating equipment and appliances. The two copper conductors consist of a number of fine, soft copper wires to give flexibility, each conductor being covered with a close wrap of strong cotton to protect it from any chemical action of the rubber insulation. The individual conductors are insulated with seamless, code rubber compound. Each conductor is then served with asbestos. The two conductors are then twisted, and strong cotton of either blue gray or black color is braided over them.

Size A.W.G.	Construction	Current Carrying Cap. Amps.	Insulation Thickness Inches	Approx. Overall Diam. Inches	Wt.Lb. Per 1000 Ft.	Feet Per Coil
18	41x.0063	10	1/64	.280	33	250
18	41x.0063	10	1/64	.290	34	250
16	65x.0063	15	1/64	.315	44	250
16	65x.0063	15	1/64	.330	46	250
14	104x.0063	20	1/64	.335	56	250
14	104x.0063	20	1/64	.345	65	250

DECK CABLE



Deck Cable is the same as Type PWP except for addition of heavy jute fillers to provide increased strength. Dimensions are approximately the same as for Type PWP, but weights differ slightly because of the jute fillers. Labeled as Type PWP Cord.

The above data are approximate and subject to normal manufacturing tolerances.

FLEXIBLE CORDS
TYPE PD REINFORCED CORD
300 AND 600 VOLTS



For portable or pendant use in dry places. Each conductor is tightly braided with strong cotton. The conductors are then twisted and a strong glazed cotton is braided over them.

Size A.W.G.	Construction	Current Carrying Cap. Amps.	Insulation Thickness Inches	Approx. Overall Diam. Inches	Net Wt.Lb. Per 1000 Ft.	Feet Per Coil
*18	16/#30	5	2/64	.320	32	250
*16	26/#30	7	2/64	.340	41	250
**14	41/#30	15	3/64	.440	64	250
**12	65/#30	20	3/64	.480	42	250
**10	104/#30	25	3/64	.525	58	250

TYPE P REINFORCED FLEXIBLE LAMP CORD
300 AND 600 VOLTS



This cord is manufactured in soft black cotton finish. For pendant use or portable use in dry places. The individual conductors are insulated with seamless code standard compound and covered with a strong cotton braid. They are then twisted together and a rubber jacket is applied. Over this is closely braided a fine glazed or soft cotton yarn.

Size A.W.G.	Construction	Current Carrying Cap. Amps.	Insulation Thickness Inches	Approx. Overall Diam. Inches	Net Wt.Lb. Per 1000 Ft.	Feet Per Coil
*18	16/#30	5	1/64	.290	46	250
*18	16/#30	5	2/64	.350	67	250
*16	26/#30	7	2/64	.380	80	250
**14	41/#30	15	3/64	.475	65	250
**12	65/#30	20	3/64	.515	80	250
**10	104/#30	25	3/64	.560	105	250

TYPE PWP MOISTURE-PROOF REINFORCED CORD
300 AND 600 VOLTS



For pendant or portable use in damp places.

The two copper conductors consist of a number of fine, soft copper wires to give flexibility, each conductor being covered with a close wrap of strong cotton to protect it from any chemical action of the rubber insulation. The individual conductors are insulated with seamless code standard rubber compound. Over each insulated conducted is braided strong cotton. The two conductors are twisted together and a rubber jacket is applied. The outer braid of cotton is thoroughly saturated with a weatherproof compound and highly polished.

Size A.W.G.	Construction	Current Carrying Cap. Amps.	Insulation Thickness Inches	Approx. Overall Diam. Inches	Net Wt.Lb. Per 1000 Ft.	Feet Per Coil
*18	16/#30	5	1/64	.290	51	250
*18	16/#30	5	2/64	.355	74	250
*16	26/#30	7	2/64	.380	89	250
**14	41/#30	15	3/64	.480	68	250
**12	65/#30	20	3/64	.520	85	250
**10	104/#30	25	3/64	.565	110	250

*Rated at 300 Volts.
**Rated at 600 Volts.

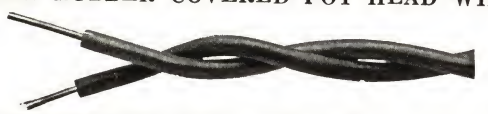
The above data are approximate and subject to normal manufacturing tolerances.

RUBBER COVERED TELEPHONE WIRES
SINGLE CONDUCTOR OR TWISTED PAIR



Size B. & S.	Diam. Over Rubber, Inches	Size B. & S.	Diam. Over Rubber, Inches
14	11/64	18	7/64
14	5/32	19	7/64
16	5/32	19	3/32
16	9/64	20	3/32
16	1/8	22	3/32
18	1/8	----	----

PLAIN RUBBER COVERED POT HEAD WIRE



Both conductors black rubber, fin on one conductor.

Size B. & S.	Duplex Twisted Diameter Over All	Wt. Per 1000 Ft.	Price Per 1000 Ft.
19	3/32	20	Market Price
20	3/32	19	Market Price
22	3/32	18	Market Price

TWISTED PAIR INTERIOR WIRE



Soft tinned copper conductors, rubber insulated, braided and twisted. Standard colors are olive green or oak tan. May also be furnished in single or three conductor.

Size	Diam. Over Rubber, Inches	Approx. Wt. Lbs. Per 1000 Ft.	Standard Length On Coil
22	.056	24	500′
19	.094	48	500′
18	.109	59	500′

FLAME PROOF JUMPER WIRE



Soft tinned copper conductors, rubber insulated, braided and twisted. One conductor white cotton, one conductor red cotton, saturated with flame proof compound.

Size	Diam. Over Rubber, Inches	Approx. Wt. Lbs. Per 1000 Ft.	Standard Length On Coil
22	.056	21	500′
20	.085	25	500′
19	.094	42	500′

COPPER CLAD TELEPHONE WIRE



Copper clad rubber insulated, twisted pair drop wire has very largely replaced the use of No. 14 copper drop wire, having approximately the same breaking strength as the latter, and having ample conductivity for telephone requirements. It costs less, is smaller and weighs less than copper wire, and its life is longer.

Size B&S	Diam. Over Rubber, In.		Wt. Lb. 1000 Ft.
17	7/64	Raised Thread Tracer	40

Single conductors are one-half the price of twisted pair. Triple conductors are one and one-half times the price of twisted pair. Four conductors are twice the price of twisted pair. No deductions will be made for lighter insulation.

RUBBER COVERED TELEPHONE WIRES

COPPER TELEPHONE DUPLEX DROP WIRE



The wire is for outside use only. The wires are insulated with two reversed winds of cotton yarn, covered with a close protecting braid, all thoroughly saturated with black weatherproof compound, and finished with a hard, lasting polish. The conductors are then twisted together. One wire has raised tracer.

Size B. & S.	Approx. Wt. Per 1000 Ft.	200 Lbs. in Case: No. Coils	200 Lbs. in Case: Lb. Each	
14	53	12	17	Market Price
16	32	12	17	Market Price
18	23	12	17	Market Price
19	20	12	17	Market Price

TRIPLEX TELEPHONE WIRE



Conductors are coded which facilitates ease of identification. Recommended for telephone and signal wire.

Size	Diameter	Weight	
19	$\frac{3}{32}$	42	Market Price

SINGLE AND THREE CONDUCTOR BRAIDED TELEPHONE WIRE



Same copper and insulation specifications as Copper Duplex above.

Single conductors are one-half the price of double conductors. Triplex conductors, one and one-half times the price of double conductors.

ANNUNCIATOR WIRE



Annunciator wire is copper wire insulated with two wraps of cotton wound in reverse direction, saturated in paraffine and highly polished. Put up on 7 and 1 pound spools and in 1 and ½ pound coils.

Size B&S	Single Conductor: Feet Per Lb.	Single Conductor: Lbs. per 1000 Ft.	Twisted Pair: Feet Per Lb.	Twisted Pair: Lbs. per 1000 Ft.	Duplex: Feet Per Lb.	Duplex: Lbs. per 1000 Ft.
12	44	22.7	21	47.6	....	....
14	68	14.7	33	30.3	....	....
16	104	9.6	51	19.6	40	25
18	158	6.4	77	13	55	18.2
20	225	4.5	108	8.25	75	13.3

Size B&S	Advance Over Base	Size B&S	Advance Over Base
16	**$0.05**	20	**$0.07**
18	**.06**		

Extra Advances

Tinned Wire **$0.02**
Twisted Pairs .... **.01**
½ lb. Coils..... **.02**
1 Lb. Coils.....**$0.01**
1 Lb. Spools..... **.02**

DAMP-PROOF OFFICE WIRE



This wire is double braided, the inner braid saturated with black weatherproof compound. The outer braid is specially treated with wax, highly polished and will not collect dust. Damp-proof office wire is carried regularly in the following colors: red, red and white, blue and blue and white, brown, brown and white, black, black and white, orange, orange and white. It is put up in coils of about 10 pounds each, or in spools of 5 or 10 pounds each, and packed in cases of approximately 150 and 200 pounds each.

Sizes 16 and 18 wire, in same colors, are also carried in duplex wire, being two separately insulated conductors, color coded, under one braid.

Size B.&S.	Single Conductor: Feet Per Lb.	Single Conductor: Lbs. per 1000 Ft.	Twisted Pair: Feet Per Lb.	Twisted Pair: Lbs. per 1000 Ft.	Duplex: Feet Per Lb.	Duplex: Lbs. per 1000 Ft.
14	50	20	24	41.7	28	35.7
16	68	14.7	33	30.3	37	27
18	100	10	48	20.8	53	19
20	136	7.4	65	15.3	70	14.25

ELEVATOR ANNUNCIATOR CABLE

FLEXIBLE



This type of cable is designed for connecting the annunciator in an elevator car with the signal push buttons on different floors.

Each conductor is composed of 16 strands of No. 30 soft copper wire (equivalent to No. 18 B. & S. gauge), laid together and insulated with two wrappings of cotton wound in reverse directions and one cotton braid, color coded. These insulated conductors are cabled around a stout core of jute, which gives extra tensile strength and increased flexibility, and the whole is covered with two outside braids of cotton, the inner braid white and the outer black. This is a dry braid cable.

Weights per 1000 Feet

No. of Cond.	Wt. Lbs.	No. of Cond.	Wt. Lbs.	No. of Cond.	Wt. Lbs.	No. of Cond.	Wt. Lbs.	No. of Cond.	Wt. Lbs.
4	39	8	71	12	102	16	130	20	160
5	47	9	79	13	109	17	138	....	.....
6	55	10	86	14	115	18	145	....	.....
7	63	11	94	15	123	19	152	....	.....

THERMOSTAT CONTROL CABLE

BRAIDED—ARMORED



Thermostat cable is made of annunicator wires color coded, cabled and has an outer braid of brown cotton, waxed finish. Unless otherwise specified the three conductor is made with one each red, white and blue wires; four conductor red, white, blue and red and white; five conductor red, white, blue, red and white and blue and white. The armored is of the same construction as the braided, but has a protective covering of soft steel.

Both are regularly furnished in coils of approximately 250, 500 or 1000 feet. Braided No. 18-3 conductor may be had on 500 foot spools without extra charge.

Approximate Weight in Pounds Per 1000 Feet

Size	Braided	Armored	Size	Braided	Armored
16—2	22	50	18—2	18	36
16—3	31.5	61	18—3	23	44
16—4	41	72	18—4	31	54
16—5	52	89	18—5	38	67
Four conductor composed of 2 No. 18 and 2 No. 16.....				38	70

WEATHERPROOF ANNUNCIATOR WIRE

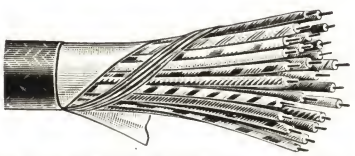


No. 18 solid, single braid. Insulated with one cotton braid thoroughly saturated with weatherproof compound. Put up in 5-pound coils. Weight 8 pounds per 1000 feet.

Prices upon application.

TELEPHONE CABLES

TYPE B BRAIDED CABLES



For all indoor work provided that runs do not occur in places where excessive dampness or mechanical injury is likely to be encountered. All wires are served with one winding of silk and one of cotton. The wires are cabled up and impregnated with moisture resisting compound.

Cat. No.	No. Cond.	Conductors	O.D. In.	Price per 100 Ft.
B- 4	4	4 No. 18	3/16	$7.50
B- 8	8	3 No. 18, 5 No. 22	1/4	14.78
B-12	12	3 No. 18, 9 No. 22	9/32	20.15
B-16	16	4 No. 18, 12 No. 22	5/16	22.50
B-21	21	4 No. 16, 17 No. 22	3/8	27.75
BP-26	26	2 prs. No. 16, 11 prs. No. 22	7/16	36.00
BP-38	38	2 prs. No. 16, 17 prs. No. 22	15/32	45.20
BP-46	46	2 prs. No. 16, 21 prs. No. 22	1/2	52.65

TYPE L LEAD ENCASED CABLES

Type "L" cables in all sizes are constructed exactly like the "B" type except that instead of the braided outer casing a lead sheath of suitable thickness is used. Intended for use out of doors, underground and wherever dampness or moisture exists.

Cat. No.	No. Cond.	Conductors	O.D. In.	Price per 100 Ft.
L- 4	4	4 No. 18	7/16	$27.50
L- 8	8	3 No. 18, 5 No. 22	9/32	41.25
L-12	12	3 No. 18, 9 No. 22	5/16	48.15
L-16	16	4 No. 18, 12 No. 22	13/32	52.75
L-21	21	4 No. 16, 17 No. 22	11/32	62.35
LP-26	26	2 prs. No. 16, 11 prs. No. 22	7/16	71.40
LP-38	38	2 prs. No. 16, 17 prs. No. 22	17/32	99.50
LP-46	46	2 prs. No. 16, 21 prs. No. 22	9/16	109.10

ROUND MAGNET WIRE

ENAMELED

Size B. & S.	Nom. Diam. Bare	Insulation Increase	Overall Diam.	Feet Per Lb.	Diam. Reel or Spool	Trav. Reel or Spool
10	.1019	.0021	.1039	31.12	24	6
11	.0907	.002	.0927	39.20	24	6
12	.0808	.0019	.0827	49.74	24	6
13	.072	.0019	.0739	63.32	24	6
14	.0641	.0019	.066	80.12	24	6
15	.0571	.0018	.0589	101.32	12	6
16	.0508	.0017	.0525	127.16	12	6
17	.0453	.0016	.0469	160.24	12	6
18	.0403	.0015	.0418	201.82	12	6
19	.0359	.0015	.0374	261.99	8	6
20	.032	.0014	.0334	320.41	8	6
21	.0285	.0014	.0299	403.86	8	6
22	.0254	.0012	.0266	510.59	6	2¾
23	.0226	.0012	.0238	642.80	6	2¾
24	.0201	.0012	.0213	810.70	6	2¾
25	.0179	.0011	.0190	1029.44	6	2¾
26	.0159	.0011	.0170	1282.71	6	2¾
27	.0142	.001	.0152	1621.53	4½	2¾
28	.0126	.001	.0136	2061.00	4½	2¾
29	.0113	.0009	.0122	2601.46	4½	2¾
30	.010	.0008	.0108	3299.57	4½	2¾
31	.0089	.0008	.0097	4119.80	4½	2¾
32	.008	.0008	.0088	5196.16	4½	2¾
33	.0071	.0007	.0078	6571.60	4½	2¾
34	.0063	.0007	.007	8201.43	4½	2¾
35	.0056	.0006	.0062	9831.87	3½	2¾
36	.005	.0006	.0056	12265.42	3½	2¾

ENAMELED AND COTTON COVERED

Size B. & S.	Nom. Diam. Bare	Overall Diam. E&SCC	Overall Diam. E&DCC	Feet Per Lb. E&SCC	Feet Per Lb. E&DCC
16	.0508	.0575	.0615	124.17	121.27
17	.0453	.0519	.0559	155.97	151.90
18	.0403	.0468	.0508	195.78	189.63
19	.0359	.0424	.0464	253.40	242.96
20	.032	.0384	.0424	308.41	295.90
21	.0285	.0349	.0389	386.04	367.75
22	.0254	.0311	.0356	487.04	463.54
23	.0226	.0283	.0328	608.02	575.18
24	.0201	.0258	.0303	761.44	711.39
25	.0179	.02325	.0275	946.61	874.89
26	.0159	.02125	.0255	1182.73	1090.86
27	.0142	.01945	.0237	1480.60	1346.60
28	.0126	.01785	.0221	1859.77	1658.40
29	.0113	.01645	.0207	2310.54	2006.02
30	.010	.01505	.0193	2850.87	2456.58
31	.0089	.01395	.0182	3535.69	2986.59
32	.008	.01305	.0173	4358.25	3550.51
33	.0071	.01205	.0163	5314.34	4212.83
34	.0063	.01125	.0155	6458.70	4872.58
35	.0056	.01045	.0147	7552.30	5668.61
36	.005	.0096	.0136	9171.79	6488.03

ENAMELED AND SILK COVERED

		E&SSC	E&DSC	E&SSC	E&DSC
16	.0508	.0545	.056	125.77	124.47
17	.0453	.0489	.0504	158.44	156.64
18	.0403	.0438	.0453	199.35	196.87
19	.0359	.0394	.0409	258.50	255.03
20	.032	.0354	.0369	315.80	311.22
21	.0285	.0319	.0334	397.52	391.25
22	.0254	.0286	.0301	501.78	493.12
23	.0226	.0258	.0273	630.48	617.67
24	.0201	.0233	.0248	792.46	774.77
25	.0179	.0210	.0225	993.31	968.43
26	.0159	.019	.0205	1245.33	1207.44
27	.0142	.0172	.0187	1430.41	1410.80
28	.0126	.0156	.0171	1978.04	1900.00
29	.0113	.0142	.0157	2483.23	2373.61
30	.010	.0128	.0143	3127.24	2969.39
31	.0089	.0117	.0132	3868.02	3639.33
32	.008	.0108	.0123	4820.43	4487.32
33	.0071	.0098	.0113	6026.63	5556.48
34	.0063	.009	.0105	7415.10	6755.39
35	.0056	.0082	.0097	8788.12	7929.59
36	.005	.0076	.0091	10756.15	9557.49

The above data are approximate and subject to normal manufacturing tolerances.

TINNED OR AMALOY COATED SOLID WIRE

SOFT OR ANNEALED COPPER



Tinned copper wire and cable can be furnished, either soft annealed or hard drawn, in strandings as well as in solid conductor form. The solid conductor form is normally limited to No. 1 A.W.G. and smaller sizes. Tinned soft or annealed wires are manufactured in accordance with all requirements of A.S.T.M. Spec. B33.

The more commonly used tinned wires and cables are shown in the following table.

Special Amaloy, in place of tin, is used in numerous applications where desirable and can be supplied when required.

Size A. W. G.	Nom. Diam. Mils	Diameter Range —Mils— Min.	Max.	Breaking Strength Lb.	Resist. Ohms per 1000 Feet 68°F.	Net Wt. Lb. per 1000 Feet	Standard —Packages— Feet	Net Wt. Lb.
40	3.145	3.045	3.445	.311	1126.	.03208	62,300	■2
39	3.531	3.431	3.831	.392	893.0	.04015	49,800	■2
38	3.965	3.865	4.265	.494	708.1	.05025	39,800	■2
37	4.453	4.353	4.753	.623	561.6	.06304	31,700	■2
36	5.000	4.900	5.300	.785	445.4	.07907	63,200	■5
35	5.615	5.515	5.915	.990	353.2	.09929	50,300	■5
34	6.305	6.205	6.605	1.249	280.1	.1247	40,100	■5
33	7.080	6.980	7.380	1.575	221.1	.1567	31,900	■5
32	7.950	7,850	8.250	1.986	176.1	.1968	25,400	■5
31	8.928	8.828	9.228	2.504	139.7	.2476	20,200	■5
30	10.03	9.93	10.33	3.157	110.8	.3113	38,500	■12
29	11.26	11.15	11.60	3.981	87.85	.3917	30,600	■12
28	12 64	12.51	13.02	4.895	68.92	.4929	24,300	■12
27	14.20	14.06	14.63	6.172	54.66	.6204	19,300	■12
26	15.94	15.78	16.42	7.783	43.34	.7810	15,400	■12
25	17.90	17.72	18.44	9.815	34.37	.9833	12,200	■12
24	20.10	19.90	20.70	12.38	27.26	1.238	9,690	■12
23	22.57	22.34	23.25	15.41	21.17	1.559	7,700	■12
22	23.35	25.10	26.11	19.43	16.79	1.965	6,100	■12
21	28.46	28.17	29.31	24.50	13.31	2.474	10,100	■25
20	31.96	31.64	32.92	30.89	10.56	3.117	8,020	■25
19	35.89	35.53	36.97	38.95	8.373	3.927	20,370	•80
18	40.30	39.90	41.51	49.12	6.640	4.949	24,250	•120
17	45.26	44.81	46.62	61.93	5.266	6.237	19,240	•120
16	50.82	50.31	52.34	78.10	4.176	7.860	15,270	•120
15	57.07	56.50	58.78	98.48	3.312	9.906	12,110	•120
14	64.08	63.44	66.00	124.2	2.626	12.84	19,470	•250
13	71.96	71.24	74.12	156.6	2.083	15.74	15,880	•250
12	80.81	80.00	83.23	197.5	1.652	19.84	12,600	•250
11	90.74	89.83	93.46	249.0	1.310	25.00	10,000	•250
10	101.9	100.9	104.9	314.0	1.039	31.52	7,930	•250
9	114.4	113.2	117.8	380.5	.8153	39.73	6,290	•250
8	128.5	127.2	132.3	479.8	.6465	50.09	4,990	•250
7	144.3	142.8	148.6	605.0	.5127	63.15	3,959	•250
6	162.0	160.4	166.9	762.9	.4066	79.61	3,140	•250
5	181.9	180.1	187.3	961.9	.3225	100.4	2,490	•250
4	204.3	202.2	210.4	1213.	.2557	126.6	1,975	•250
3	229.4	227.1	236.3	1530.	.2028	159.5	1,567	•250
2	257.6	255.0	265.3	1929.	.1608	201.1	1,094	•220
1	289.3	286.4	298.0	2432.	.1275	253.6	867	•220

•On reels. ■On spools.

Breaking strengths: Maximum values for nominal diameters based upon tensile strength limits of A.S.T.M. Spec. B33.

Resistances: Maximum values for nominal diameters based upon resistivity limits of A.S.T.M. Spec. B33.

Weights: Nominal values for estimating purposes only and subject to normal variations in manufacture.

The above data are approximate and subject to normal manufacturing tolerances.

CONCENTRIC STRANDED CABLE

BARE AND TINNED COPPER—SOFT OR ANNEALED

MEDIUM HARD AND HARD DRAWN



Class AA. Used for bare cable.

Class A. For weather-resistant (weatherproof), slow-burning and slow-burning weather-resistant cable, and for bare cable where greater flexibility than is afforded by Class AA is required.

Class B. For cable insulated with various materials such as rubber, paper, varnished cloth, etc., and for the cable indicated under Class A where greater flexibility is required.

Class C and Class D. For cable where greater flexibility is required than is provided by Class B cable.

Size A.W G.	C.M.	Class AA No. Strs	Class AA Diam. Ind. Mils	Class A No. Strs	Class A Diam. Ind. Mils	Class B No. Strs	Class B Diam. Ind. Mils	Class C No. Strs	Class C Diam. Ind. Mils	Class D No. Strs	Class D Diam. Ind. Mils
20	1,022	....	.....	.....	.....	7	12.1	19	7.3	.....	.....
18	1,624	....	.....	.....	.....	7	15.2	19	9.2	.....	.....
16	2,583	....	.....	.....	.....	7	19.2	19	11.7	.....	.....
14	4,107	....	.....	.....	.....	7	24.2	19	14.7	37	10.5
12	6,530	....	.....	.....	.....	7	30.5	19	18.5	37	13.3
10	10,380	....	.....	.....	.....	7	38.5	19	23.4	37	16.7
9	13,090	....	.....	.....	.....	7	43.2	19	26.2	37	18.8
8	16,510	....	.....	.....	.....	7	48.6	19	29.5	37	21.1
7	20,820	....	.....	.....	.....	7	54.5	19	33.1	37	23.7
6	26,250	....	.....	.....	.....	7	61.2	19	37.2	37	26.6
5	33,100	....	.....	.....	.....	7	68.8	19	41.7	37	29.9
4	41,740	3	118.0	7	77.2	7	77.2	19	46.9	37	33.6
3	52,630	3	132.5	7	86.7	7	86.7	19	52.6	37	37.7
2	66,370	3	148.7	7	97.4	7	97.4	19	59.1	37	42.4
1	83,690	3	167.0	7	109.3	19	66.4	37	47.6	61	37.0
1/0	105,500	7	122.8	7	122.8	19	74.5	37	53.4	61	41.6
2/0	133,100	7	137.9	7	137.9	19	83.7	37	60.0	61	46.7
3/0	167,800	§7	154.8	§7	154.8	19	94.0	37	67.3	61	52.4
4/0	211,600	‡7	173.9	‡7	173.9	19	105.5	37	75.6	61	58.9
.....	250,000	12	144.3	19	114.7	37	82.2	61	64.0	91	52.4
.....	300,000	12	158.1	19	125.7	37	90.0	61	70.1	91	57.4
.....	350,000	12	170.7	19	135.7	37	97.3	61	75.7	91	62.0
.....	400,000	19	145.1	19	145.1	37	104.0	61	81.0	91	66.3
.....	450,000	19	153.9	37	110.3	37	110.3	61	85.9	91	70.3
.....	500,000	19	162.2	37	116.2	37	116.2	61	90.5	91	74.1
.....	550,000	37	121.9	37	121.9	¶61	95.0	91	77.7	127	65.8
.....	600,000	37	127.3	37	127.3	‖61	99.2	91	81.2	127	68.7
.....	650,000	37	132.5	61	103.2	61	103.2	91	84.5	127	71.2
.....	700,000	37	137.5	61	107.1	61	107.1	91	87.7	127	74.8
.....	750,000	37	142.4	61	110.9	61	110.9	91	90.8	127	76.5
.....	800,000	37	147.0	61	114.5	61	114.5	91	93.8	127	79.4
.....	900,000	37	156.0	61	121.5	61	121.5	91	99.4	127	84.2
.....	1,000,000	37	164.4	61	128.0	61	128.0	91	104.8	127	88.7
.....	1,100,000	....	.....	61	134.3	91	109.9	127	93.1	169	80.7
.....	1,200,000	....	.....	61	140.3	91	114.8	127	97.2	169	84.3
.....	1,250,000	....	.....	61	143.1	91	117.2	127	99.2	169	86.0
.....	1,300,000	....	.....	61	146.0	91	119.5	127	101.2	169	87.7
.....	1,400,000	....	.....	61	151.5	91	124.0	127	105.0	169	91.0
.....	1,500,000	....	.....	61	156.8	91	128.4	127	108.7	169	94.2
.....	1,600,000	....	.....	91	132.6	127	112.2	169	97.3	217	85.9
.....	1,700,000	....	.....	91	136.7	127	115.7	169	100.3	217	88.5
.....	1,750,000	....	.....	91	138.7	127	117.4	169	101.8	217	89.8
.....	1,800,000	....	.....	91	140.6	127	119.1	169	103.2	217	91.1
.....	1,900,000	....	.....	91	144.5	127	122.3	169	106.0	217	93.6
.....	2,000,000	....	.....	91	148.2	127	125.5	169	108.8	217	96.0
.....	2,500,000	....	.....	91	165.7	127	140.3	169	121.6	217	107.3
.....	3,000,000	....	.....	127	153.7	169	133.2	217	117.6	271	105.2
.....	3,500,000	....	.....	127	166.0	169	143.8	217	127.0	271	113.6
.....	4,000,000	....	.....	169	153.8	217	135.8	271	121.5	271	121.5
.....	4,500,000	....	.....	169	163.2	217	144.0	271	128.9	271	128.9
.....	5,000,000	....	.....	169	172.0	217	151.8	271	135.8	271	135.8

‡Optional construction for No. 4/0 A.W.G. size in Class AA and Class A is 12 wires of 132.8 mils diameter.

§Optional construction for No. 3/0 A.W.G. size in Class AA and Class A is 12 wires of 118.3 mils diameter.

‖Optional construction for 600,000 c.m. size in Class B is 37 wires of 127.3 mils diameter.

¶Optional construction for 550,000 c.m. size in Class B is 37 wires of 121.9 mils diameter.

The above data are approximate and subject to normal manufacturing tolerances.

BARE COPPER WIRE

Coarse and Intermediate Sizes

SOFT OR ANNEALED, MEDIUM HARD AND HARD DRAWN



Dimensions, Weights and Packages

Size A.W.G.	Diameter Mils	Area		Weight per 1000 Ft. Net Lbs.	Standard Packages		
		Circular Mils	Square Inches		On Reels		In Coils
					Feet	Weight Net Lbs.	Weight Net Lbs.
4/0	460.0	211,600	.1662	640.5	1000	641	250
3/0	409.6	167,800	.1318	507.9	2640	1341	250
2/0	364.8	133,100	.1045	402.8	5280	2127	250
1/0	324.9	105,500	.08289	319.5	5280	1687	250
1	289.3	83,690	.06573	253.3	5280	1338	250
2	257.6	66,370	.05213	200.9	5280	1061	250
3	229.4	52,630	.04134	159.3	5280	841	250
4	204.3	41,740	.03278	126.4	5280	667	250
5	181.9	33,100	.02600	100.2	.....	.....	250
6	162.0	26,250	.02062	79.46	.....	.....	250
7	144.3	20,820	.01635	63.02	.....	.....	250
8	128.5	16,510	.01297	49.97	.....	.....	250
9	114.4	13,090	.01028	39.63	.....	.....	250
10	101.9	10,380	.008155	31.43	.....	.....	250
11	90.74	8,234	.006467	24.92	.....	.....	250
12	80.81	6,530	.005129	19.77	.....	.....	125
13	71.96	5,178	.004067	15.68	.....	.....	125
14	64.08	4,107	.003225	12.43	.....	.....	125
15	57.07	3,257	.002558	9.858	.....	.....	125
16	50.82	2,583	.002028	7.818	.....	.....	125
17	45.26	2,048	.001609	6.200	.....	.....	125

Diameter tolerances (a) Soft or annealed (A.S.T.M. Spec. B 3) plus-minus 1%.
(b) Medium hard (A.S.T.M. Spec. B 2) or hard drawn (A.S.T.M. Spec. B 1):
For wires 100 mils in diameter or larger plus-minus 1%.
For wires less than 100 mils in diameter plus-minus 1 mil.

The above data are approximate and subject to normal manufacturing tolerances.

Breaking and Tensile Strengths

Size A.W.G.	SOFT OR ANNEALED	MEDIUM HARD				HARD DRAWN	
	Breaking Strength Maximum Lbs.	Tensile Strength Maximum Lbs. per Sq. In.	Breaking Strength		Tensile Strength		Breaking Strength Minimum Lbs.	Tensile Strength Minimum Lbs. per Sq. In.
			Maximum Lbs.	Mimimum Lbs.	Maximum Lbs. per Sq. In.	Minimum Lbs. per Sq. In.		
4/0	5983.	36,000	8143.	6980.	49,000	42,000	8143.	49,000
3/0	4745.	36,000	6590.	5667.	50,000	43,000	6722.	51,000
2/0	3763.	36,000	5330.	4599.	51,000	44,000	5519.	52,800
1/0	2984.	36,000	4310.	3730.	52,000	45,000	4517.	54,500
1	2432.	37,000	3484.	3024.	53,000	46,000	3688.	56,100
2	1929.	37,000	2815.	2450.	54,000	47,000	3003.	57,600
3	1530.	37,000	2274.	1984.	55,000	48,000	2439.	59,000
4	1213.	37,000	1814.	1584.	55,330	48,330	1970.	60,100
5	961.9	37,000	1446.	1264.	55,660	48,600	1591.	61,200
6	762.9	37,000	1155.	1010.	56,000	49,000	1280.	62,100
7	605.0	37,000	921.0	806.6	56,330	49,330	1030.	63,000
8	479.8	37,000	734.7	643.9	56,660	49,660	826.0	63,700
9	380.5	37,000	586.1	514.2	57,000	50,000	661.2	64,300
10	314.0	38,500	467.5	410.4	57,330	50,330	529.2	64,900
11	249.0	38,500	372.9	327.6	57,660	50,660	422.9	65,400
12	197.5	38,500	297.5	261.6	58,000	51,000	337.0	65,700
13	156.6	38,500	237.2	208.8	58,330	51,330	268.0	65,900
14	124.2	38,500	189.2	166.6	58,660	51,660	213.5	66,200
15	98.48	38,500	150.9	133.0	59,000	52,000	169.8	66,400
16	78.10	38,500	120.3	106.2	59,330	52,330	135.1	66,600
17	61.93	38,500	95.97	84.71	59,660	52,660	107.5	66,800

Breaking strengths are based on tensile strength requirements of A.S.T.M. Spec. B 3 (soft or annealed), B 2 (medium hard), and B 1 (hard drawn).

SQUARE AND RECTANGULAR COPPER WIRE

SOFT OR ANNEALED, BARE AND TINNED (A.S.T.M. Specification B48)



Used in the construction of transformers and other electrical machinery. Made by processing round wires. Finished with round corners.

Physical characteristics are controlled to provide sections and suitable for edgewise bending. Fabricated wire is subject to special final polishing and cleaning.

Dimensional Limits—Standard Sections

Section		Bare Wire		Tinned Wire	
Square	Width and Thickness.....inches	Max. .365	Min. .0571	Max. .325	Min. .0571
	Area (Corrected for Corner Radii).....	Maximum	Minimum	Maximum	Minimum
	Circular Mils	165,360	3468	130,150	3468
	Square Mils	129,870	2724	102,220	2724
Rectangular	Width .....inches	Max. .750	Min. .040	Max. .750	Min. .040
	Thickness .....inches	Max. .365	Min. .010	Max. .320	Min. .010
	Maximum Area (Corrected for Corner Radii)				
	Circular Mils	186,660		130,150	
	Square Mils	146,600		102,220	
	Max. Width at Max. Thick.....inches	.365 at .365		.330 at .320	
	Max. Thick. at Max. Width.....inches	.200 at .750		.141 at .750	

Standard packages (net weight—pounds):
(a) For sectional areas of 5000 square mils or less, 110 pounds on reels.
(b) For sectional areas greater than 5000 square mils, 220 pounds on reels.

Tolerances and Physical Properties—For Standard Sections

Thickness Inches	Standard Copper Radii — For Widths .040"—.438"	For Widths .439"—.625"	For Widths .626"—.750"	Standard Thickness Tolerances — For Widths .040"—.500"	For Widths .501"—.750"	Maximum Tensil Strength Lb. per Sq.In.	Minimum Elongation 10-inch Section
.010	Half Round	Half Round	Half Round	.0010"	.0010"	.....	14%
.011—.020	Half Round	Half Round	Half Round	.0010"	.0010"	40,000	20%
.021—.050	Half Round	Half Round	Half Round	.0010"	.0010"	38,500	25%
.051—.100	.025"	Half Round	Half Round	.0010"	.0010"	37,000	30%
.101—.105	.025"	Half Round	Half Round	1%	1%	37,000	30%
.106—.125	.031"	Half Round	Half Round	1%	1%	37,000	30%
.126—.165	.031"	.047"	.063"	1%	1%	37,000	30%
.166—.200	.047"	.047"	.063"	1%	1%	37,000	30%
.201—.225	.047"	.047"	.063"	1%	1%	37,000	30%
.226—.289	.063"	.063"	.094"	1%	1%	37,000	30%
.290—.300	.063"	.063"	.....	1%	1%	36,000	30%
.301—.365	.063"	.063"	.....	.0030"	.....	36,000	30%

Standard Width Tolerances:

Nominal Width in Inches.....	.040—.300	.301—.750
Permissible Variation in Width, plus-minus.....	.003"	1%

Resistivity at 68° F.; 891.58 pounds per mile-ohm (equivalent to 98.16% I.A.C.S. Conductivity)—maximum.
Density at 68° F.; 8.89 g. per cubic cm. (equivalent to .000003027 pound per circular mil-foot or .000003854 pound per square mil-foot—nominal for calculating weights.

Fine Wire Sizes

Size A.W.G.	Max. Resistance Ohms Per 1000 Ft., 68° F. — Soft or Annealed	Med. Hard	Hard Drawn	Size A.W.G.	Max. Resistance Ohms Per 1000 Ft., 68° F. — Soft or Annealed	Med. Hard	Hard Drawn
45	3406.	3459.	3477.	31	132.6	134.6	135.3
44	2702.	2743.	2758.	30	105.1	106.8	107.3
43	2142.	2176.	2187.	29	83.37	84.66	85.10
42	1699.	1725.	1734.	28	66.11	67.14	67.49
41	1347.	1368.	1375.	27	52.43	53.25	53.52
40	1069.	1085.	1091.	26	41.58	42.23	42.44
39	847.4	860.5	865.0	25	32.97	33.49	33.66
38	672.0	682.4	686.0	24	26.15	26.56	26.69
37	532.9	541.2	544.0	23	20.74	21.06	21.17
36	422.6	429.2	431.4	22	16.45	16.70	16.79
35	335.2	340.2	342.1	21	13.04	13.24	13.31
34	265.8	269.9	271.3	20	10.34	10.50	10.56
33	210.8	214.1	215.2	19	8.202	8.330	8.373
32	167.2	169.8	170.6	18	6.505	6.606	6.640

Resistances are maximum values for nominal diameters based upon A.S.T.M. Specification resistivities, at right:

	Lb. per Mil-Ohm	Equiv. I.A.C.S. Conductivity %
Soft or Annealed (A.S.T.M. Spec. B3).....	891.15	98.16
Medium Hard (A.S.T.M. Spec. B2):		
Diam. .460"–.325" (4/0–1/0 A.W.G.)	896.15	97.66
Diam. .324"–.040" (1–18 A.W.G.)	905.44	96.66
Hard Drawn (A.S.T.M. Spec. B1):		
Diam. .460"–.325" (4/0–1/0 A.W.G.)	900.77	97.16
Diam. .324"–.040" (1–18 A.W.G.)	910.15	96.16

For wire sizes smaller than 18 A.W.G. in medium hand and hard drawn tempers: No. A.S.T.M. requirements; resistances for these sizes in table based on 905.44 pounds per mile-ohm (96.66% conductivity) for medium hard wire, and 910.15 pounds per mile-ohm (96.16% conductivity) for hard drawn wire.

The above data are approximate and subject to normal manufacturing tolerances.

BARE CONCENTRIC STRANDED CABLE

(Circular Mil Sizes)

SOFT OR ANNEALED COPPER



Size Circular Mils	Overall Diameter Inches	Area Square Inches	Number of Strands	Diameter of Individual Strands Mils	Breaking Strength Lbs.	Resistance Ohms per 1000 Ft. 68°F.	Weight per 1000 Ft. Net Lbs.	Std. Pkgs. On Reels Feet	Std. Pkgs. On Reels Weight Net Lbs.
5,000,000	2.581	3.927	B—217	151.8	145,300	.002219	15,890.	As Specified	
5,000,000	2.580	3.927	A—169	172.0	145,300	.002219	15,890.	As Specified	
4,500,000	2.448	3.534	B—217	144.0	130,800	.002465	14,300.	As Specified	
4,500,000	2.448	3.534	A—169	163.2	130,800	.002465	14,300.	As Specified	
4,000,000	2.309	3.142	B—217	135.8	116,200	.002747	12,590.	500	6295
4,000,000	2.307	3.142	A—169	153.8	116,200	.002747	12,590.	500	6295
3,500,000	2.159	2.749	B—169	143.9	101,700	.003139	11,020.	500	5510
3,500,000	2.158	2.749	A—127	166.0	101,700	.003139	11,020.	500	5510
3,000,000	1.998	2.356	B—169	133.2	87,180	.003628	9,353.	500	4677
3,000,000	1.998	2.356	A—127	153.7	87,180	.003628	9,353.	500	4677
2,500,000	1.824	1.964	B—127	140.3	72,650	.004353	7,794.	500	3897
2,500,000	1.823	1.964	A— 91	165.7	72,650	.004353	7,794.	500	3897
2,000,000	1.631	1.571	B—127	125.5	58,120	.005388	6,175.	500	3088
2,000,000	1.630	1.571	A— 91	148.2	58,120	.005388	6,175.	500	3088
1,750,000	1.526	1.374	B—127	117.4	50,850	.006158	5,403.	550	2972
1,750,000	1.526	1.374	A— 91	138.7	50,850	.006158	5,403.	550	2972
1,500,000	1.412	1.178	B— 91	128.4	43,590	.007185	4,631.	650	3010
1,500,000	1.411	1.178	A— 61	156.8	43,590	.007185	4,631.	650	3010
1,250,000	1.289	.9817	B— 91	117.2	36,320	.008622	3,859.	750	2895
1,250,000	1.288	.9817	A— 61	143.1	36,320	.008622	3,859.	750	2895
1,000,000	1.152	.7854	(B-A)— 61	128.0	29,060	.01078	3,088.	1000	3088
900,000	1.094	.7069	(B-A)— 61	121.5	26,150	.01197	2,779.	1100	3057
800,000	1.031	.6283	(B-A)— 61	114.5	23,250	.01347	2,470.	1200	2964
750,000	.998	.5890	(B-A)— 61	110.9	21,790	.01437	2,316.	1250	2895
700,000	.964	.5498	(B-A)— 61	107.1	20,340	.01540	2,161.	1400	3026
600,000	.893	.4712	B— 61	99.2	18,140	.01796	1,853.	1600	2964
600,000	.891	.4712	A— 37	127.3	17,440	.01796	1,853.	1600	2964
500,000	.814	.3927	(B-A)— 37	116.2	14,530	.02155	1,544.	2000	3088
450,000	.772	.3534	(B-A)— 37	110.3	13,080	.02395	1,389.	2000	2779
400,000	.728	.3142	B— 37	104.0	11,620	.02694	1,235.	2000	2470
400,000	.726	.3142	A— 19	145.1	11,620	.02694	1,235.	2000	2470
350,000	.681	.2749	B— 37	97.3	10,580	.03079	1,081.	2640	2853
350,000	.679	.2749	A— 19	135.7	10,170	.03079	1,081.	2640	2853
300,000	.630	.2356	B— 37	90.0	9,071	.03592	926.3	2640	2445
300,000	.629	.2356	A— 19	125.7	8,178	.03592	926.3	2640	2445
250,000	.575	.1964	B— 37	82.2	7,559	.04311	771.9	3500	2702
250,000	.574	.1964	A— 19	114.7	7,265	.04311	771.9	3500	2702

Area of cross section (equivalent to sum of areas of individual wires) shall not be less than 98% of listed areas (A.S.T.M. Spec B 8).

Letter designation under "Number of Strands" indicates A.S.T.M. strand class (A.S.T.M. Spec B 8).

Breaking strengths: Maximum values for nominal diameters based upon tensile strength limits of A.S.T.M. Specs. B 3 and B 8.

Resistances: Maximum values for nominal diameters based upon A.S.T.M. Spec B 3 resistivity of 891.58 lbs. per mile-ohm (equivalent to 98.16% I.A.C.S. conductivity), increased as follows for stranding:

(a) 5,000,000—4,500,000 CM: 5%
(b) 4,000,000—3,500,000 CM: 4%
(c) 3,000,000—2,500,000 CM: 3%
(d) 2,000,000— 250,000 CM: 2%

Weights: Same percentage increases as for resistance stranding allowance.

The above data are approximate and subject to normal manufacturing tolerances.

BARE CONCENTRIC STRANDED CABLE
(A.W.G. Sizes)

SOFT OR ANNEALED COPPER



Size A.W.G.	Area Circular Mils	Area Square Inches	Number of Strands	Diameter of Individual Strands Mils	Overall Diameter Inches	Breaking Strength Lbs.	Resistance Ohms per 1000 Ft. 68°F.	Weight per 1000 Ft. Net Lbs.	Standard Packages On Reels Feet	On Reels Weight Net Lbs.	In Coils Weight Net Lbs.
4/0	211,600	.1662	B—19	105.5	.528	6149.	.05093	653.3	5,280	3450	300
4/0	211,600	.1662	A—12	132.8	.552	6149.	.05093	653.3	5,280	3450	300
4/0	211,600	.1662	A— 7	173.9	.552	6149.	.05093	653.3	5,280	3450	300
3/0	167,800	.1318	B—19	94.0	.470	5074.	.06422	518.1	5,280	2736	300
3/0	167,800	.1318	A—12	118.3	.492	4876.	.06422	518.1	5,280	2736	300
3/0	167,800	.1318	A— 7	154.8	.464	4876.	.06422	518.1	5,280	2736	300
2/0	133,100	.1045	B—19	83.7	.418	4025.	.08097	410.9	5,280	2170	300
2/0	133,100	.1045	A— 7	137.9	.414	3868.	.08097	410.9	5,280	2170	300
1/0	105,500	.08289	B—19	74.5	.373	3190.	.1021	325.7	5,280	1720	300
1/0	105,500	.08289	A— 7	122.8	.368	3066.	.1021	325.7	5,280	1720	300
1	83,690	.06573	B—19	66.4	.332	2531.	.1288	258.4	10,560	2729	300
1	83,690	.06573	A— 7	109.3	.328	2432.	.1288	258.4	10,560	2729	300
2	66,370	.05213	C—19	59.1	.296	2007.	.1624	204.9	10,560	2164	300
2	66,370	.05213	(B-A)— 7	97.4	.292	2007.	.1624	204.9	10,560	2164	300
3	52,630	.04134	C—19	52.6	.263	1592.	.2047	162.5	10,560	1716	300
3	52,630	.04134	(B-A)— 7	86.7	.260	1592.	.2047	162.5	10,560	1716	300
4	41,740	.03278	C—19	46.9	.234	1262.	.2582	128.9	10,560	1361	300
4	41,740	.03278	(B-A)— 7	77.2	.232	1262.	.2582	128.9	10,560	1361	300
5	33,100	.02600	C—19	41.7	.209	1001.	.3256	102.2	10,560	1079	250
5	33,100	.02600	B— 7	68.8	.206	1001.	.3256	102.2	10,560	1079	250
6	26,250	.02062	C—19	37.2	.186	793.8	.4105	81.05	12,000	973	250
6	26,250	.02062	B— 7	61.2	.184	793.8	.4105	81.05	12,000	973	250
7	20,820	.01635	C—19	33.1	.166	629.6	.5176	64.28	12,000	771	250
7	20,820	.01635	B— 7	54.5	.164	629.6	.5176	64.28	12,000	771	250
8	16,510	.01297	C—19	29.5	.147	499.2	.6528	50.98	15,000	765	250
8	16,510	.01297	B— 7	48.6	.146	499.2	.6528	50.98	15,000	765	250
9	13,090	.01028	C—19	26.2	.131	395.8	.8233	40.42			
9	13,090	.01028	B— 7	43.2	.130	395.8	.8233	40.42			
10	10,380	.008155	C—19	23.4	.117	313.9	1.038	32.05			
10	10,380	.008155	B— 7	38.5	.116	313.9	1.038	32.05			
12	6,530	.005129	C—19	18.5	.0925	205.1	1.650	20.16			
12	6,530	.005129	B— 7	30.5	.0915	197.5	1.650	20.16			
14	4,107	.003225	C—19	14.7	.0735	129.0	2.624	12.68	As Specified		
14	4,107	.003225	B— 7	24.2	.0726	124.2	2.624	12.68			
16	2,583	.002028	C—19	11.7	.0585	81.15	4.172	7.975			
16	2,583	.002028	B— 7	19.2	.0576	81.15	4.172	7.975			
18	1,624	.001276	B— 7	15.2	.0456	51.02	6.636	5.014			
20	1,022	.0008023	B— 7	12.1	.0363	32.11	10.54	3.155			

Area of cross section (equivalent to sum of areas of individual wires) shall not be less than 98% of listed areas (A.S.T.M. Spec. B 8).

Letter designation under "Number of Strands" indicates A.S.T.M. strand class (A.S.T.M. Spec. B 8).

Breaking strengths: Maximum values for nominal diameters based upon tensile strength limits of A.S.T.M. Specs. B 3 and B 8.

Also supplied in alternate strandings.

Resistances: Maximum values for nominal diameters based upon A.S.T.M. Spec. B 3 resistivity of 891.58 lbs. per mile-ohm (equivalent to 98.16% I.A.C.S. conductivity) increased 2% for stranding.

Weights: Same percentage increases as for resistance stranding allowance.

The above data are approximate and subject to normal manufacturing tolerances.

HARD DRAWN COPPER TROLLEY WIRES

(97.16% I.A.C.S. Conductivity) A.S.T.M. Specification B47

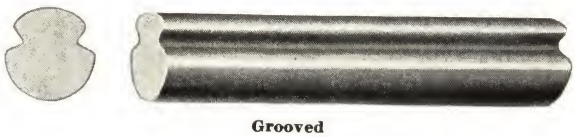
In the manufacture of this wire special care is taken in rolling and drawing to obtain a surface free from imperfections and wire continually true in shape. This produces a contact wire giving maximum life and freedom from operating trouble.



Round



Figure 8



Grooved



Figure 9 (Deep Section)

Manufactured in accordance with American Society for Testing Materials, Specification B47 and American Transit Engineering Association Specification D2. Specifications were prepared jointly by the two associations in collaboration with Association of American Railroads and are identical.

Trolley wire of these configurations is not at present included in the specifications of the American Society of Testing Materials. These shapes conform with requirements of specifications covering round and grooved wire.

Figure 9 furnished primarily for industrial use.

Round Conductors

Nominal Conductor Size C.M. or A.W.G.	■Overall Diam. Inches	Area C.M.	Area Square Inches	Net Wt.,Lb. Per 1000 Ft.	Net Wt.,Lb. Per Mile	Tensil Strength Wt. per Sq. In.	Breaking Strength Pounds	Resist. Ohms 1000 Ft. 68° F.	Reels Feet	Reels Net Weight Pounds
300,000	.548	300,000	.2356	908.1	4795	46,400	10,930	.03558	2640	2400
4/0	.460	211,600	.1662	640.5	3382	49,000	8,143	.05044	5280	3382
3/0	.410	168,100	.1320	508.8	2687	51,000	6,732	.06350	5280	2687
2/0	.365	133,200	.1046	403.2	2129	52,800	5,523	.08014	5280	2129
1/0	.325	105,600	.08294	319.7	1688	54,500	4,520	.1011	5280	1688

Grooved Conductors

350,000	.620	351,200	.2758	1063.	5612	42,800	11,800	.03039	1250	1330
300,000	.574	299,800	.2355	907.6	4792	44,200	10,410	.03560	2640	2400
4/0	.482	212,000	.1665	641.9	3389	46,600	7,759	.05035	5280	3389
3/0	.430	167,300	.1314	506.4	2674	48,500	6,373	.06380	5280	2674
2/0	.392	137,900	.1083	417.6	2205	50,200	5,437	.07740	5280	2205
•1/0	.360	105,600	.08294	319.7	1688	51,800	4,296	.1011	5280	1688

•Figure 8 Conductors

350,000	.722x.570	350,000	.2749	1059.	5594	42,800	11,800	.03050	2640	2797
4/0	.600x.450	211,600	.1662	640.5	3382	46,600	7,745	.05044	5280	3382
3/0	.540x.400	168,100	.1320	508.8	2687	48,500	6,400	.06350	5280	2687
2/0	.480x.352	133,200	.1046	403.2	2129	50,200	5,250	.08014	5280	2129
1/0	.420x.312	105,600	.08294	319.7	1688	51,800	4,300	.1011	5280	1688

•Figure 9 Conductors, Deep Section

400,000	.750x.5625	391,500	.3075	1185.	6257	40,500	12,450	.02726	1000	1185

•Not at present included in A.S.T.M. Specification B47.

■For Fig. 8 and 9 wire, dimensions given are nominal height of entire section and width of lower lobe.

For 6/0 A.W.G. (336,200 c.m.) grooved or Fig. 8 will regularly be furnished in 350,000 c.m.

The above data are approximate and subject to normal manufacturing tolerances.

BARE CABLE
COMPOSITE COPPERWELD-COPPER



Type A

Composite cable unites the electrical conductance of copper with mechanical strength of copperweld. This cable is rugged and long-lived; little affected by corrosion even in unfavorable atmospheres.

Particularly adapted to long span construction or other service conditions requiring more than average strength combined with liberal conductance. For use on transmission lines, rural distribution lines, railroad electrification, river crossings, and many kinds of special construction.

Composite cable is available in a wide range of properties and sizes. Other composite cable sizes, adapted to specific requirements can be supplied.

Equivalent Hard-Drawn Copper Size CM or Awg	Type of Conductor	Construction: Hard-Drawn Copper	Construction: Copperweld 30% Extra High Strength	Area C.M.	Overall Diameter (Inch)	Net Weight Pounds: Per 1000 Ft.	Net Weight Pounds: Per Mile	Breaking Strength Lbs.	Resistance Ohms per 1000 Ft. at 68° F.	On Reels: Feet	On Reels: Net Weight Lbs.
350,000	E	12–.1576	7–.1576	471,600	.788	1,403	7,409	32,420	.03143	2,500	3,510
300,000	E	12–.1459	7–.1459	404,250	.729	1,203	6,351	27,770	.03667	2,500	3,010
250,000	E	12–.1332	7–.1332	336,890	.666	1,002	5,292	23,920	.04400	2,500	2,510
250,000	EK	15–.1242	4–.1242	293,210	.621	884.2	4,669	17,840	.04400	2,500	2,210
250,000	V	9–.1600	3–.1480	295,979	.637	889.9	4,699	17,420	.04400	3,100	2,760
4/0	E	12–.1225	7–.1225	285,100	.613	848.3	4,479	20,730	.05199	5,000	4,240
4/0	EK	15–.1143	4–.1143	248,173	.571	748.4	3,951	15,370	.05199	5,000	3,740
4/0	V	9–.1472	3–.1361	250,515	.586	753.2	3,977	15,000	.05199	3,700	2,790
4/0	F	6–.1833	1–.1833	235,100	.550	710.2	3,750	12,290	.05199	2,000	1,420
2/0	V	9–.1167	3–.1080	157,576	.465	473.8	2,502	9,846	.08265	5,900	2,800
2/0	F	6–.1454	1–.1454	147,900	.436	446.8	2,359	8,094	.08265	3,200	1,430
2/0	G	5–.1542	2–.1542	166,400	.463	496.6	2,622	10,510	.08265	2,900	1,440
1/0	F	6–.1294	1–.1294	117,200	.388	354.1	1,870	6,536	.1043	4,100	1,450
1/0	G	5–.1373	2–.1373	131,900	.412	393.6	2,078	8,563	.1043	3,600	1,420
1/0	J	4–.1467	3–.1467	150,700	.440	444.3	2,346	10,970	.1043	5,000	2,220
1	F	6–.1153	1–.1153	92,990	.346	280.9	1,483	5,266	.1315	5,200	1,460
1	G	5–.1222	2–.1222	104,600	.367	312.2	1,649	6,956	.1315	4,600	1,440
2	A	2–.1699	1–.1699	86,570	.366	256.8	1,356	5,876	.1658	2,300	600
2	F	6–.1026	1–.1026	73,740	.308	222.8	1,176	4,233	.1658	6,500	1,450
4	A	2–.1347	1–.1347	54,440	.290	161.5	852.8	3,938	.2636	3,800	600
6	A	2–.1068	1–.1068	34,240	.230	101.6	536.3	2,585	.4150	6,000	600
7	A	2–.08949	1–.1266	32,030	.223	93.66	494.6	2,754	.5232	4,200	400
8	A	2–.07969	1–.1127	25,400	.199	74.27	392.2	2,233	.6598	5,400	400
8	D	1–.1016	2–.1016	30,960	.219	89.21	471.0	3,256	.6598	6,700	600
9½	D	1–.08081	2–.08081*	19,590	.174	56.46	298.1	1,743	.9170	8,900	500
			*High Strength Copperweld, 40% Conductivity								
11	3 No. 12	.....	3–.08081*	19,590	.174	54.80	289.3	2,236	1.361	10,000	548

Copperweld

Type Conductor	No. Strands	Modulus Lbs. per Sq. In.	Coefficient of Linear Expansion per Degree F.
E	19	19,500,000	.000,008,4
EK	19	18,500,000	.000,008,8
V	12	18,500,000	.000,008,8
F	7	18,000,000	.000,009,0
G	7	19,000,000	.000,008,6
J	7	20,000,000	.000,008,3
2A to 6A	3	19,000,000	.000,008,5
7A to 8A	3	21,000,000	.000,008,1
D	3	22,000,000	.000,007,8
3 No. 12	3	23,000,000	.000,007,2

Type E—Consists of 7-strand concentric stranded core of Copperweld and outer layer of twelve copper wires.

Type EK—Consists of 7-strand concentric stranded core of four Copperweld and three copper wires and an outer layer of twelve copper wires.

Type V—Consists of 3-strand core of Copperweld and outer layer of nine copper wires.

Type F—Consists of inner strand of Copperweld and outer layer of six copper wires.

Type G—Consists of inner strand of copper and outer layer of four copper and two Copperweld wires.

Type J—Consists of inner strand of Copperweld and outer layer of four copper and two Copperweld wires.

Type A—Three-wire stranded conductor consisting of one Copperweld and two copper wires.

Type D—Three-wire stranded conductor consisting of two Copperweld wires and one copper wire.

WEATHERPROOF WIRE AND CABLE

With Solid Copperweld Conductors

Size A.W.G.	No. Ft. on Reel	No. Ft. in Coil	Triple-Braided Net Wt., Lbs. Per 1000 Feet	Triple-Braided Net Wt., Lbs. Per Reel	Triple-Braided Net Wt., Lbs. Per Coil	Double-Braided Net Wt., Lbs. Per 1000 Feet	Double-Braided Net Wt., Lbs. Per Reel	Double-Braided Net Wt., Lbs. Per Coil
2	1000	1000	243	243	243	222	222	222
4	1560	1560	154	240	240	141	220	220
6	2450	2450	106	262	262	94	230	230
8	3950	1975	71	280	140	62	246	123
9	5000	2500	58	288	144	51	256	128
10	6200	3100	51	316	158	43	266	133
12	9800	1960	33	325	65	28	275	55

Sizes 8 to 12 A.W.G. inclusive also supplied in 100-pound bundles of four coils each.

Unit weights and standard package data, for both triple and double braided weatherproof wire with solid bronze conductors, are the same as for weatherproof wire with solid copper conductors.

With Composite Copper-Copperweld Conductors

Conductor No.	No. Ft. on Reel	No. Ft. in Coil	Triple-Braided Net Wt., Lbs. Per 1000 Feet	Triple-Braided Net Wt., Lbs. Per Reel	Triple-Braided Net Wt., Lbs. Per Coil	Double-Braided Net Wt., Lbs. Per 1000 Feet	Double-Braided Net Wt., Lbs. Per Reel	Double-Braided Net Wt., Lbs. Per Coil
2A	1150	460	356	409	164	321	369	148
3A	1500	500	291	437	146	261	392	131
4A	1900	633	224	426	142	202	384	128
5A	2400	800	187	449	150	166	399	133
6A	3000	1000	141	424	141	127	382	127
7A	2100	1050	133	280	140	119	251	125
8A	2700	1350	112	302	151	99	267	134

Tabulated reel and coil lengths are approximate average amounts; variations of 10% plus or minus may be expected and random lengths will be included but these random lengths shall not be less than 50% of the tabulated lengths nor shall they consitute more than 10% of any shipment.

The above data are approximate and subject to normal manufacturing tolerances.

COPPERWELD-COPPER 3-WIRE STRANDED CONDUCTORS



Type A 3-wire Copperweld-Copper Conductor



Type D 3-wire Copperweld-Copper Conductor

Copperweld-copper 3-wire stranded conductors are used for all types of overhead distribution lines, and particularly for long-span construction. Conductances and strengths are well suited for economical line design. The three-wire triangular shape makes these conductors practically free from line vibration, and their large individual wires provide a very substantial and rugged conductor. They are easily installed and give excellent performance in field service.

Copperweld - copper conductors combine the high conductance of copper with the high strength of Copperweld. Long life on long spans demands a high-strength conductor in which both the strength wire and conductor wires are completely non-rusting. The Copperweld strength wire used in all Copperweld-copper conductors has all the enduring life of the solid copper conductor wires — a completely non-rusting combination.

The Type A conductors are composed of one Extra-High-Strength Copperweld wire and two hard-drawn copper wires. Other types include the Type C composed of one 40% conductivity Copperweld wire with two hard-drawn copper wires and the Type D composed of two Copperweld wires and one copper wire.

Physical Properties of Copperweld-Copper Conductors

Conductor Number	EQUIVALENT STRANDED H. D. COPPER CONDUCTANCE A.W.G.	C.M.	Resistance 68° F. Ohms per 1000 ft.	Diameter of Cable Inch	Diameter of Wires Inch	Breaking Load Pounds	WEIGHT, LBS. Per 1000 Ft.	Per Mile	Cross-Section Square Inch	Conductor Number
2A	2	66,370	.1641	.366	.1699	5,876	256.8	1,356	.06799	2A
3A	3	52,630	.2070	.326	.1513	4,810	203.6	1,075	.05392	3A
4A	4	41,740	.2610	.290	.1347	3,938	161.5	852.8	.04276	4A
5A	5	33,100	.3291	.258	.1200	3,193	128.1	676.3	.03391	5A
5D	5	33,100	.3291	.310	.1438	6,035	178.9	944.4	.04874	5D
6A	6	26,250	.4150	.230	.1068	2,585	101.6	536.3	.02689	6A
6D	6	26,250	.4150	.276	.1281	4,942	141.8	748.9	.03866	6D
7A	7	20,820	.5232	.223	.1266*	2,754	93.66	494.6	.02516	7A
7D	7	20,820	.5232	.246	.1141	4,022	112.5	594.0	.03066	7D
8A	8	16,510	.6593	.199	.1127*	2,233	74.27	392.2	.01995	8A
8C	8	16,510	.6598	.179	.08081*	1,362	60.67	320.3	.01604	8C
8D	8	16,510	.6598	.219	.1016	3,256	89.21	471.0	.02431	8D
9½D	9½	11,750	.9170	.174	.08081	1,743	56.46	298.1	.01539	9½D

Modulus of Elasticity
2A to 6A Incl. 19,000,000
7A and 8A 21,000,000
C 19,000,000
D 22,000,000

Coefficient of Expansion per degree F.
2A to 6A Incl. .000,008,5
7A and 8A .000,008,1
C .000,008,5
D .000,007,8

*Copper wires — diameter
7A .08949
8A .07969
8C .08336

COPPERWELD 3-WIRE STRANDED CONDUCTORS



Copperweld 3-wire Stranded Conductor

Copperweld 3 - wire stranded conductors are ideal for overhead lines and spans where conductor size is determined mainly by mechanical strength and ruggedness. Their applications particularly include rural branch lines, service taps on transmission lines, and special long spans across rivers, ravines, etc.

Compared to the Type A Copperweld - copper conductors, these conductors with all Copperweld wires, have higher tensile strength and lower conductance. From a structural and performance standpoint, they are very similar.

Physical Properties of Copperweld 3-Wire Stranded Conductors

Conductor Size A.W.G.	CONDUCTIVITY EQUIVALENT TO H. D. COPPER A.W.G.	C.M.	DIAMETER Conductor Inch	Each Wire Inch	Resistance 68° Fahr. Ohms per 1000 Ft.	BREAKING LOAD High Strength Lbs.	Extra High Strength Lbs.	WEIGHT, LBS. Per 1000 Ft.	Per Mile	Cross Section Sq. In.
30% Conductivity High Strength and Extra High Strength Copperweld 3-Wire Stranded Copperweld Conductors										
3 No. 8	8	15150	.277	.1285	.7176	5,174	6,282	138.5	731.5	.03890
3 No. 9	9	12010	.247	.1144	.9049	4,250	5,129	109.9	580.1	.03085
3 No. 10	10	9528	.220	.1019	1.141	3,509	4,160	87.13	460.0	.02446
40% Conductivity High Strength Copperweld 3-Wire Stranded Copperweld Conductors										
3 No. 8	7	20200	.277	.1285	.5383	4,730	—	138.5	731.5	.03890
3 No. 9	8	16020	.247	.1144	.6788	3,898	—	109.9	580.1	.03085
3 No. 10	9	12700	.220	.1019	.8559	3,221	—	87.13	460.0	.02446
3 No. 12	11	7988	.174	.08081	1.361	2,236	—	54.80	289.3	.01539

Modulus of Elasticity: 23,000,000. Coefficient of linear expansion: .000,007,2 per degree Fahrenheit.

The above data are approximate and subject to normal manufacturing tolerances.

TELEPHONE AND TELEGRAPH WIRES



There are three standards of extra galvanized telephone and telegraph wire in general commercial use:

"Extra Best Best" (E.B.B.)—Made by improved continuous process and stands highest in conductivity of any telegraph wire with a weight per mile ohm of from 4,700 to 5,000 pounds. It is largely used by telegraph companies and in railway telegraph service.

"Best Best" (B.B.)—Superior to the E. B. B. in mechanical qualities and equal in galvanizing but of somewhat lower electrical value. Weight per mile ohm 5,600 to 6,000 pounds. This grade is used very largely by telephone companies.

"Steel" (or homogeneous metal)—More expressly designed for short-line telephone service, where a measure of conductivity can be exchanged for high tensile strength in a light wire. Weight per mile ohm 6,500 to 7,000 pounds.

All grades are galvanized the same and to the highest commercial standard.

Based on Standard Specifications

Birmingham Wire Gage	Diam. in Mils	Area in Circular Mils	Approximate Wt. Lbs. Per 1000 Ft.	Approximate Wt. Lbs. Per Mile	Bundles Per Mile
4	238	56,644	153	811	4
6	203	41,209	112	590	3
8	165	27,225	74	390	2
9	148	21,904	60	314	2
10	134	17,956	49	258	2
11	120	14,400	39	206	2
12	109	11,881	32	170	2
14	83	6,889	19	99	2

Sizes BWG	Approx. Breaking Strain in Lb. Ex. B.B.	B.B.	Steel	Resistance Per Mile (International Ohms) at 60° F. Ex. B.B.	B.B.	Steel
4	2,028	2,271	2,433	5.98	7.15	8.32
6	1,475	1,652	1,770	8.22	9.83	11.44
8	975	1,092	1,170	12.43	14.87	17.31
9	785	879	942	15.44	18.47	21.50
10	645	722	774	18.79	22.48	26.16
11	515	577	618	23.54	28.16	32.77
12	425	476	510	28.52	34.12	39.71
14	247	277	297	48.98	58.59	68.18

Prices

Size BWG	List Price in Cents Per Pound Ex. B.B.	B.B.	Steel
4	7¼	6¾	6¼
6	7⅛	6½	6
8	7⅛	6½	6
9	7⅛	6½	6
10	7¼	6¾	6¼
11	7¼	6¾	6¼
12	7½	6⅞	6½
14	8⅛	7½	7⅛

1500 pounds and over $0.01¼ per pound less.

The above data are approximate and subject to normal manufacturing tolerances.

STEEL STRAND

For Guying Poles and for Span Wire



This strand is used chiefly for guying poles and smokestacks, for supporting trolley wire and for operating railroad signals.

Seven Steel Wires Twisted Into a Single Strand, Galvanized or Extra Galvanized

Diam. In.	Approx. Wt. Lb. Per 1000 Ft.	Galvanized or Extra Galvanized Regular — Approx. Strength in Lb.	Price Per 100 Ft.	Extra Galvanized Siemens-Martin — Approx. Strength in Lb.	Price Per 100 Ft.
½	517	7,400	$5.50	12,100	$5.25
⅜	296	4,250	3.50	6,950	3.25
5/16	205	3,200	2.50	5,350	2.50
¼	121	1,900	1.75	3,150	1.70

Diam. In.	Approx. Wt. Lb. Per 1000 Ft.	Extra Galvanized — High Strength — Approx. Strength in Lb.	Price Per 100 Ft.	Extra High Strength — Approx. Strength in Lb.	Price Per 100 Ft.
½	517	18,800	$7.25	26,900	$8.80
⅜	296	10,800	4.40	15,400	5.25
5/16	205	8,000	3.20	11,200	4.25
¼	121	4,750	2.25	6,650	2.85

TINNED STEEL ARMATURE BINDING WIRE

American Wire Gauge (B&S)	Diam. In.	Actual Tensile Strength in Pounds Grade A	Grade B	Grade C1 or Special	Grade C2 or C
10	.1019	938	1,631	1,957	2,447
11	.0907	743	1,292	1,551	1,938
12	.0808	590	1,026	1,231	1,538
13	.072	468	814	977	1,221
14	.0641	371	645	774	968
15	.0571	294	512	615	768
16	.0508	233	405	486	608
17	.0453	185	322	387	484
18	.0403	147	255	306	383
19	.0359	116	202	243	304
20	.032	92.5	181	193	241
21	.0285	73.4	128	133	191
22	.0253	57.8	101	121	151
23	.0226	46.1	80.2	88.3	120
24	.0201	30.5	63.5	76.2	95.2
25	.0179	28.9	50.5	60.4	75.5
26	.0159	22.8	39.7	47.7	59.6

Grade A—115,000 to 125,000 Lb. tensile strength per square inch. Used to bind armatures of small motors and dynamos.

Grade B—200,000 to 220,000 Lb. tensile strength per square inch. Commercial grade. For motors and dynamos of ordinary commercial size and speed.

Grade C1 or Grade Special—240,000 to 270,000 Lb. tensile strength per square inch. Made of high grade rope wire and used where great strength is required.

Grade C2 or Grade C—300,000 to 350,000 Lb. tensile strength per square inch. Used when very high tensile strength is required, as on motors and dynamos of unusual size and high speed.

Armature binding wire is furnished in coils or on spools.

Standard coils weighing from 5 to 75 pounds each. Inside diameter of coils, sizes 20 and coarser, 16 inches; finer than 20, 8 inches.

Standard spools weighing 5, 10, 25, 50 and 100 pounds each.

Prices upon application.

The above data are approximate and subject to normal manufacturing tolerances.

GALVANIZED STEEL STRAND

STANDARD STEEL STRAND

Single and Double Galvanized



Seven Steel Wires Twisted Into a Single Strand

Diam. In.	Size of Wires	Wt. Per 1000 Ft., Lbs.	Strength in Lbs.	Price Per 100 Ft.
½	8	517	7400	**$5.50**
7/16	9½	399	5700	**4.50**
3/8	11	273	4250	**3.50**
5/16	12	205	3200	**2.50**
¼	14	121	1900	**1.75**
3/16	16	72.9	1150	**1.25**
5/32	17	51.3	870	**1.15**

SIEMENS-MARTIN STRAND

Double Galvanized

Siemens-Martin strand affords greater strength than standard quality and is used to sustain telephone cables, and for other purposes of character.

Seven Steel Wires Twisted Into a Single Strand

Diam. In.	Size of Wires	Wt. Per 1000 Ft., Lbs.	Strength in Lbs.	Price Per 100 Ft.
½	8	517	12100	**$5.25**
7/16	9½	399	9350	**4.30**
3/8	11	273	6950	**3.25**
5/16	12	205	5350	**2.50**
9/32	13	164	4250	**2.05**
¼	14	121	3150	**1.70**
3/16	16	72.9	1900	**1.35**

HIGH STRENGTH STRAND

Double Galvanized

Seven Steel Wires Twisted Into a Single Strand

Diam. In.	Size of Wires	Wt. Per 1000 Ft., Lbs.	Strength in Lbs.	Price Per 100 Ft.
½	8	517	18800	**$7.25**
7/16	9½	399	14500	**6.00**
3/8	11	273	10800	**4.40**
5/16	12	205	8000	**3.20**
¼	14	121	4750	**2.25**
3/16	16	72.9	2850	**1.80**

EXTRA HIGH STRENGTH STRAND

Double Galvanized

Seven Steel Wires Twisted Into a Single Strand

Diam. In.	Size of Wires	Wt. Per 1000 Ft., Lbs.	Strength in Lbs.	Price Per 100 Ft.
½	8	517	26900	**$8.80**
7/16	9½	399	20800	**7.20**
3/8	11	273	15400	**5.25**
5/16	12	205	11200	**4.25**
¼	14	121	6650	**2.85**
3/16	16	72.9	3990	**2.40**

3-PLY TWISTED GUY WIRE

Double Galvanized



For special purposes the above strand is made of the various sizes and grades of wire used in different grades of Strand, namely: Siemens-Martin; High Strength; Extra High Strength.

Prices quoted on application and depend on quantity wanted, way put up, etc. In writing for prices give full particulars.

All Strand is tested and inspected before leaving factory and is guaranteed to conform with all standard specifications.

In ordering, special care should be taken to specify kind wanted, size or length of reels or coils. If Standard Strand, whether single or double galvanized.

The above data are approximate and subject to normal manufacturing tolerances.

TELEPHONE AND TELEGRAPH WIRE

EXTRA DOUBLE GALVANIZED



Double galvanized telephone and telegraph wire is drawn from the highest grade material of special analysis galvanized to insure a wire with a maximum resistance to corrosion due to the superior adhesion of the pure zinc.

Every coil of wire is guaranteed to conform to all standard specifications, to meet the most exacting conditions and to give complete satisfaction.

"EXTRA BEST BEST" (E.B.B.) is highest in electrical conductivity, having a range of electrical resistance of 4700 to 5000 mile ohms.

"BEST BEST" (B.B.) Slightly higher in resistance than E.B.B. but combines conductivity with tensile strength to make a very popular grade, having a maximum electrical resistance of 5600 mile ohms.

"STEEL." This grade is designed for short-line service where electrical conductivity can be sacrificed for tensile strength. Maximum resistance 6500 mile ohms.

All above grades are galvanized under the same improved process.

The following table gives the weight in pounds per mile, together with the breaking strain and resistance of telephone and telegraph wire.

No.	Diam. In.	Wt. Lbs. Per Mile	Put up in Bundles of	Approx. Breaking Strain in Pounds E.B.B.	B.B.	STEEL
4	.238	811	¼ mile	2,028	2,271	2,433
6	.203	590	⅓ mile	1,475	1,652	1,770
8	.165	390	½ mile	975	1,092	1,170
9	.148	314	½ mile	785	879	942
10	.134	258	½ mile	645	722	774
11	.120	206	½ mile	515	577	618
12	.109	170	½ mile	425	476	510
14	.083	99	½ mile	247	277	297

No.	Diam. In.	Wt. Lbs. Per Mile	Put up in Bundles of	Average Resist. in Ohms at 68° F. E.B.B.	B.B.	STEEL
4	.238	811	¼ mile	5.98	7.15	8.32
6	.203	590	⅓ mile	8.22	9.83	11.44
8	.165	390	½ mile	12.43	14.87	17.31
9	.148	314	½ mile	15.44	18.47	21.50
10	.134	258	½ mile	18.79	22.48	26.16
11	.120	206	½ mile	23.54	28.16	32.77
12	.109	170	½ mile	28.52	34.12	39.71
14	.083	99	½ mile	48.98	58.59	68.18

Prices quoted on application.

The above data are approximate and subject to normal manufacturing tolerances.

BARE COPPER WIRE

HARD DRAWN

Stranded



The table given below contains standard Class A concentric strands, but a cable can be composed of either a greater or lesser number of wires, if so ordered.

Size Circular Mils	Stranding No. Wires	Stranding Diam. Each	Diam. Cable Inches	Weight, Lbs. Per 1000 Ft.	Weight, Lbs. Per Mile
2000000	91	.1482	1.630	6175	32600
1750000	91	.1387	1.526	5403	28530
1500000	61	.1568	1.411	4631	24450
1250000	61	.1431	1.288	3859	20380
1000000	61	.1280	1.152	3088	16300
950000	61	.1248	1.123	2933	15486
900000	61	.1215	1.094	2779	14670
850000	61	.1180	1.062	2624	13855
800000	61	.1145	1.031	2470	13040
750000	61	.1109	.998	2316	12230
700000	61	.1071	.964	2161	11410
650000	61	.1032	.929	2007	10597
600000	37	.1273	.891	1853	9781
550000	37	.1219	.853	1698	8965
500000	37	.1162	.813	1544	8151
450000	37	.1103	.772	1389	7336
400000	19	.1451	.726	1235	6521
350000	19	.1357	.679	1081	5706

Size Awg	Size Circular Mils	Stranding No. Wires	Stranding Diam. Each	Diam. Cable Inches	Weight, Lbs. Per 1000 Ft.	Weight, Lbs. Per Mile
	300000	19	.1257	.629	926	4891
	250000	19	.1147	.574	772	4076
0000	211600	12	.1328	.552	653	3450
000	167800	12	.1183	.492	518	2736
00	133100	7	.1379	.414	411	2170
0	105500	7	.1228	.368	326	1720
1	83690	7	.1093	.328	258	1364
2	66370	7	.0974	.292	205	1082
3	52630	7	.0867	.260	163	858
4	41740	7	.0772	.232	129	681
5	33100	7	.0688	.206	102	540
6	26250	7	.0612	.184	81	428
8	16510	7	.0486	.146	51	269
10	10380	7	.0385	.116	32	169
12	6530	7	.0305	.092	20	107
14	4107	7	.0242	.073	13	67
16	2583	7	.0192	.058	8	42
18	1624	7	.0152	.046	5	26

Solid



Bare copper wire can be furnished hard drawn, medium-hard drawn, or soft-drawn, as specified.

Size B. & S.	Capacity Circular Mils	Diam. Inches	Weight, Lbs. Per 1000 Ft.	Weight, Lbs. Per Mile
0000	211600	.4600	640	3382
000	167800	.4096	508	2682
00	133100	.3648	403	2127
0	105500	.3249	320	1687
1	83690	.2893	253	1338
2	66370	.2576	201	1061
3	52630	.2294	159	841
4	41740	.2043	126	667
5	33100	.1819	100	529
6	26250	.1620	79	420
7	20820	.1443	63	333
8	16510	.1285	50	204

Size B. & S.	Capacity Circular Mils	Diam. Inches	Weight, Lbs. Per 1000 Ft.	Weight, Lbs. Per Mile
9	13090	.1144	40	209
10	10380	.1019	31	166
11	8234	.0907	25	132
12	6530	.0808	20	104
13	5178	.07196	16	83
14	4107	.06408	12	66
15	3257	.05707	10	52
16	2583	.05082	8	41
17	2048	.04526	6	33
18	1624	.04030	5	26
19	1228	.03589	4	21
20	1022	.03196	3	16

COPPPER AND BRONZE TROLLEY WIRE



Round



Grooved

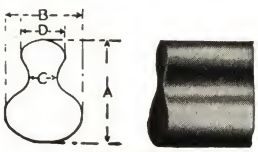


Figure 8

Trolley wire generally is made of bronze or hard drawn copper in three shapes, round, grooved and figure 8. Dimensions of commonly-used styles and sizes are shown below:

Dimensions of Hard Drawn Copper Trolley Wire

American Wire Gauge (B. & S.)	Sectional Area in Cir Mils	Approximate Dimensions A	B	C	D	E	F	G	R
Round—(Section of Trolley Wire)									
0	105,600	.325	.1625	.....	.....	.....	.....	.....	.....
00	133,200	.365	.1825	.....	.....	.....	.....	.....	.....
000	168,100	.410	.205	.....	.....	.....	.....	.....	.....
0000	211,600	.460	.230	.....	.....	.....	.....	.....	.....
Grooved—"American Standard"—(Section of Trolley Wire)									
00	133,200	.392	.196	.031	.22	78°	27°	51°	.015
000	168,100	.430	.215	.047	.24	78°	27°	51°	.015
0000	211,600	.482	.241	.063	.27	78°	27°	51°	.015
Figure 8—(Section of Trolley Wire)									
00	133,200	.480	.352	.108	.196	.....	.....	.....	.....
000	168,100	.540	.400	.130	.222	.....	.....	.....	.....
0000	211,600	.600	.450	.150	.250	.....	.....	.....	.....

G & W POTHEADS

TYPE "T" OUTDOOR
TYPE "NT" INDOOR
THREE CONDUCTOR
SHAPE "B"

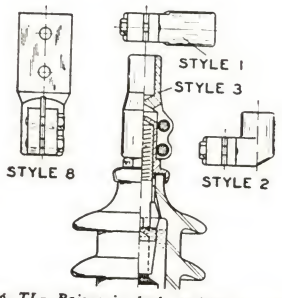


Fig. TL—Prices include solder connectors and above styles of aerial lugs. Specify style of lug wanted.

CAPNUT HERMETICALLY SEALS TOP OF PORCELAIN • INTERCHANGEABLE AERIAL LUGS

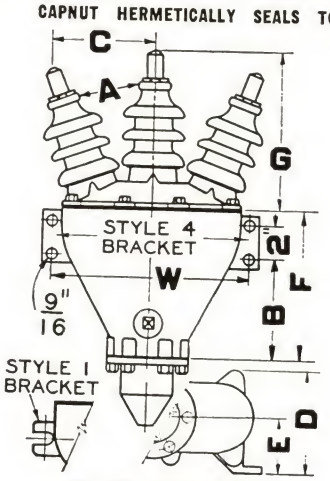


Fig. T3B—DIMENSIONS

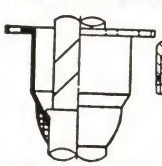


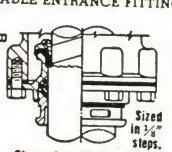
CAT. NO.
T3554B

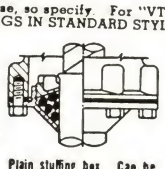
Typical of potheads listed on this page except that corrugated porcelains are used on Type "NT" and lower voltages Type "T"

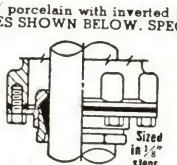
Max. Cond'r Size Mcm *	Max. Diam. Cable Inches §	Type "T" **Outdoor** CATALOG NUMBER	Type "T" **Outdoor** LIST PRICE	Type "NT" **Indoor** CATALOG NUMBER	Type "NT" **Indoor** LIST PRICE	Parts Symbols Body	Lid	Porcelain* "T"	Porcelain* "NT"	Dimensions—Inches W	B	D	E	F	G	A	C	Approx. Ship'g Weight Lb.	Approx Comp'd Req'd Gal.
600 VOLTS OUTDOOR (Flashover 40Kv. dry, 25Kv. wet) and **2500 VOLTS INDOOR** (Flashover 40 Kv. dry)																			
1/0	1¾	T3203B		NT3303B		F3C†	CF3B	CK	CK	9	4½	5½	3	6½	6⅛	2	4⅛	30	¾
250	2⅞	T3224B		NT3324B		F4C†	CF3B	CK	CK	9	6½	5¾	3	8½	6½	2	4¼	39	1
500	2⅞	T3254B		NT3354B		E4C‡	DE3BX	DA	DA	11¼	4½	7¼	3¾	8	7¼	2¼	5	53	1½
570	3½	T3275B		NT3375B		E5C‡	DE3BX	DB	DB	11¼	6	7⅜	3¾	9½	7⅝	1¾	5⅛	62	1¾
1000	3½	T3285B		NT3385B		E5C‡	DE3BX	DB	DB	11¼	6	7⅜	3¾	9½	8¼	1¾	5⅜	69	1¾
2500 VOLTS OUTDOOR (Flashover 50Kv. dry, 30Kv. wet) and **5000 VOLTS INDOOR** (Flashover 50Kv. dry)																			
1/0	1¾	T3303B		NT3403B		F3C†	CF3B	CL	CL	9	4½	5½	3	6½	7⅛	2⅜	4½	31	¾
250	2⅞	T3324B		NT3424B		F4C†	CF3B	CL	CL	9	6½	5¾	3	8½	7½	2⅜	4⅝	40	1
500	2⅞	T3354B		NT3454B		E4C‡	DE3BX	DN	DN	11¼	4½	7¼	3¾	8	8¾	2⅝	5⅜	55	1½
750	3½	T3375B		NT3475B		E5C‡	DE3BX	DP	DP	11¼	6	7⅜	3¾	9½	9⅛	2¼	5⅝	64	1¾
1000	3½	T3385B		NT3485B		E5C‡	DE3BX	DP	DP	11¼	6	7⅜	3¾	9½	9¾	2¼	5⅞	71	1¾
5000 VOLTS OUTDOOR (Flashover 60Kv. dry, 42Kv. wet) and **7500 VOLTS INDOOR** (Flashover 60Kv. dry)																			
1/0	1¾	T3403B		NT3503B		F3C†	CF3B	CB	CB	9	4½	5½	3	6½	8⅜	2¾	5	33	¾
250	2⅞	T3424B		NT3524B		F4C†	CF3B	CB	CB	9	6½	5¾	3	8½	8¾	2¾	5⅛	42	1
500	2⅞	T3454B		NT3554B		H4C†	DH3B1X	DD	DD	13	7	6⅜	3⅛	10½	10¾	5¼	8⅛	66	1¾
750	3½	T3475B		NT3575B		J5C‡	EJ3B2X	EC	EC	15½	8	7⅜	3¾	11½	11½	6⅛	9⅞	90	3½
1000	3½	T3485B		NT3585B		J5C‡	EJ3B2X	EC	EC	15½	8	7⅜	3¾	11½	12⅛	6⅛	10¼	97	3½
7500 VOLTS OUTDOOR (Flashover 70Kv. dry, 52Kv. wet) and **15000 VOLTS INDOOR▲** (Flashover 70Kv. dry)																			
1/0	2⅞	T3504B		HNT3704B		H4C‡	DH3B1	DC	DC	13	7	6⅜	3⅛	10½	10⅜	5½	8	61	1¾
250	2⅞	T3524B		HNT3724B		H4C‡	DH3B1	DC	DC	13	7	6⅜	3⅛	10½	10¾	5½	8⅛	64	1¾
500	2⅞	T3554B		.....	.....	H4C‡	DH3B1X	DC	....	13	7	6⅜	3⅛	10½	11¼	5½	8¼	68	1¾
750	3½	T3575B		.....	.....	J5C‡	EJ3B2X	EB	....	15½	8	7⅜	3¾	11½	11½	6⅛	9⅞	93	3½
1000	3½	T3585B		.....	.....	J5C‡	EJ3B2X	EB	....	15½	8	7⅜	3¾	11½	12⅛	6¼	10¼	100	3½
15000 VOLTS OUTDOOR▲ (Flashover 90Kv. dry, 65Kv. wet) and **15000 VOLTS INDOOR** (Flashover 80Kv. dry)																			
1/0	2⅞	JT3704B		NT3704B		J4C‡	EJ3B2	EE	EF	15½	6½	7¼	3¾	10	12⅝	7¾	10½	83	3
250	2⅞	JT3724B		NT3724B		J4C‡	EJ3B2	EE	EF	15½	6½	7¼	3¾	10	13	7¾	10¾	86	3
500	3½	JT3755B		NT3755B		J5C‡	EJ3B2X	EE	EF	15½	8	7⅜	3¾	11½	13½	7¾	11	95	3½
750	3½	JT3775B		NT3775B		J5C‡	EJ3B2X	EG	EH	15½	8	7⅜	3¾	11½	13⅞	7⅜	11⅛	100	3½
1000	3½	JT3785B		NT3785B		J5C‡	EJ3B2X	EG	EH	15½	8	7⅜	3¾	11½	14½	7⅜	11⅜	107	3½
15000 VOLTS OUTDOOR (Flashover 90Kv. dry, 65Kv. wet)—Large Body																			
1/0	3½	T3705B		.....	.....	K5C‡	EK3B1	EE	....	21	11	7⅜	3¾	15	14⅜	10⅜	13	136	5½
250	3½	T3725B		.....	.....	K5C‡	EK3B1	EE	....	21	11	7⅜	3¾	15	14¾	10⅜	13¼	139	5½
500	3½	T3755B		.....	.....	K5C‡	EK3B1X	EE	....	21	11	7⅜	3¾	15	15¼	10⅜	13½	130	5½
750	3½	T3775B		.....	.....	K5C‡	EK3B1X	EG	....	21	11	7⅜	3¾	15	15⅝	10	13⅝	132	5½
1000	3½	T3785B		.....	.....	K5C‡	EK3B1X	EG	....	21	11	7⅜	3¾	15	16¼	10	13⅞	139	5½
23000 VOLTS OUTDOOR (Flashover 110Kv. dry, 80Kv. wet) and **23000 VOLTS INDOOR** (Flashover 100Kv. dry)																			
1/0	3½	T3805B		NT3805B		K5C‡	EK3B1	EK	EL	21	11	7⅜	3¾	15	17	11½	14¼	147	5½
250	3½	T3825B		NT3825B		K5C‡	EK3B1	EK	EL	21	11	7⅜	3¾	15	17⅜	11½	14⅜	150	5½
500	3½	T3855B		NT3855B		K5C‡	EK3B1X	EK	EL	21	11	7⅜	3¾	15	17⅞	11½	14⅝	140	5½

†Style 1 brackets. ‡Style 4 brackets. §Wiping sleeve takes ⅛" larger diameter cable. *Also current rating, one ampere per 1,000 cm.
Filling compound not included in above prices.
Conduit couplings and armor clamps extra list.
When potheads are wanted for INVERTED use, so specify. For "VT" porcelain with inverted petticoats, add 5% and use prefix "V" in outdoor pothead catalog number.
PRICES INCLUDE CABLE ENTRANCE FITTINGS IN STANDARD STYLES SHOWN BELOW. SPECIFY STYLE WANTED. BE SURE TO GIVE CABLE DATA AND CONDUIT SIZE.

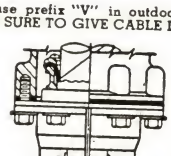

Wiping Sleeve—"WS"

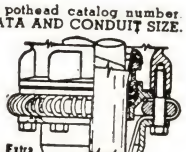

Sized in ⅛" steps.
Clamp ring and stuffing box. Invert when used with CC. Conduit couplings and armor clamps extra list.
Symbol—"CR-SB"


Plain stuffing box. Can be drilled on job to cable size. Uses cord packing.
Symbol—"SB"


Sized in ⅛" steps.
Stuffing box with Resistoyl rubber sealing bushing
Symbol—"RB"


"PB" & conduit coupling "CC"


"CR-SB" & armor clamp "AC"

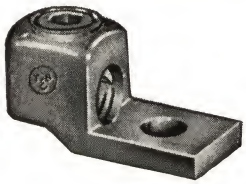

Extra Charge "AC"+ 25%
Wire armor clamp—"WAC"

Prices on request.

T & B "LOCK-TITE" LUGS AND CONNECTORS

Approved by Underwriters' Laboratories

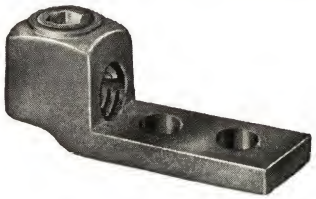
LOCK-TITE LUGS—ONE BOLT HOLE TONGUE



Seven sizes of lugs take all cable sizes from No. 4 to 1,000,000 CM and all types of conductors: Stranded, solid, flexible, etc. Each lug is one-piece design. Uniform pressure all around provides direct contact and high conductivity. Tests prove that Lock-Tite fittings make up tight, stay tight and run cooler than the cable.

Cat. No.	Description	Unit Quan.	Price Per 100	Use Key Wrench Cat. No.
31003	14 Sol. to 8 Sol.	18	**$68.00**	....
31005	8 Sol. to 6 Sol. or Str.	18	**68.50**	....
31007	4 Sol. to 1 Str.	18	**86.50**	30
31009	1 Sol. to 2/0	12	**136.00**	30
31011	2/0 to 4/0	12	**186.00**	30
31013	4/0 to 300 MCM	12	**226.00**	50
31015	300 to 500 MCM	6	**360.00**	50
31017	500 to 750 MCM	6	**620.00**	50
31019	750 to 1000 MCM	6	**720.00**	50

LOCK-TITE LUGS—TWO BOLT HOLE TONGUE

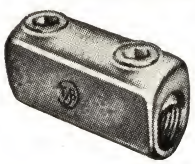


Bolt holes and spacings are standard, but lugs with blank tongue will be furnished, if specified, without extra charge.

Cat. No.	Description	Unit Quan.	Price Per 100	Use Key Wrench Cat. No.
32007	4 Sol. to 1 Str.	12	**$112.00**	30
32009	1 Sol. to 2/0	6	**162.00**	30
32011	2/0 to 4/0	6	**211.00**	30
32013	4/0 to 300 MCM	6	**270.00**	50
32015	300 to 500 MCM	3	**410.00**	50
32017	500 to 750 MCM	3	**620.00**	50
32019	750 to 1000 MCM	3	**795.00**	50

For Hex-head-screw, prefix above numbers with "H." Prices are same for both types. Special connectors can be supplied. Prices and information on request.

LOCK-TITE TWO-WAY CONNECTORS



Seven connectors splice all cables No. 4 to 1,000,000 CM. Each connector takes a wide range of cable sizes and all types of conductors. Quickly installed with key wrench.

Cat. No.	Cable Size	Unit Quan.	Std. Pkg.	Price Per 100
32507	4 Sol. to 1 Str.	12	72	**$123.00**
32509	1 Sol. to 2/0	6	36	**186.00**
32511	2/0 to 4/0	6	36	**275.00**
32513	4/0 to 300 MCM	6	36	**380.00**
32515	300 to 500 MCM	3	18	**645.00**
32517	500 to 750 MCM	3	18	**1050.00**
32519	750 to 1000 MCM	3	18	**1240.00**

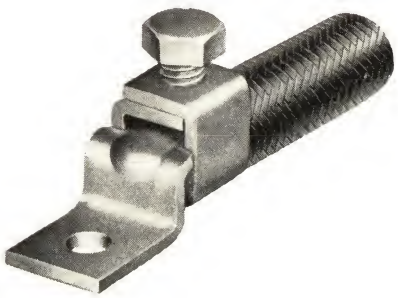
KEY WRENCH

Cat. No.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
30	1	9	**$10.00**
50	1	31	**15.00**



T & B "LUG-IT" FOR STRANDED OR SOLID WIRE

Approved by Underwriters' Laboratories



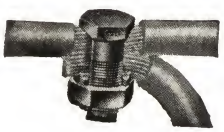
Double thickness at thread gives double thread strength and locking action. Serrated copper tongue gives high conductivity. Bronze body provides strength.

Cat. No.	Wire Range Min.	Wire Range Max.	Bolt Size	Unit Qty.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
35301	14	6	¼	200	1000	2½	**$11.00**
35401	8	2	¼	100	500	5	**14.60**
35501	4	2/0	¼	50	250	11	**30.00**
35601	1/0	4/0	⅜	10	50	22	**67.00**

T & B SPLIT BOLT

(Service Connector)

For Copper and Copperweld Wires



A service connector specially designed for tapping or splicing service wires and for making primary and secondary transformer connections.

Made of high strength Duronze, a special alloy known to be over 50 per cent stronger than hard copper or commercial bronze.

Cat. No.	Maximum Wire Size: Solid Copper	Maximum Wire Size: Stranded Copper	Maximum Wire Size: Copper-weld Type A	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
2T	10	10	....	100	2	**$ 17.00**
3T	8	8	....	100	3	**18.30**
4T	6	8	8A	100	7	**20.75**
5T	4	6	6A	100	9	**25.00**
6T	2	4	4A	100	11	**35.00**
7T	1	2	....	100	13	**37.50**
8T	....	1/0	2A	50	19	**51.50**
9T	....	2/0	....	25	26	**84.00**
10T	....	4/0	....	25	35	**141.00**
11T	....	350 MCM	....	1	75	.....
12T	....	500 MCM	....	1	100	.....
13T	....	750 MCM	....	1	150	.....
14T	....	1000 MCM	....	1	300	.....

T & B "LOCK-TITE" TEE-PARALLEL TAPS

Approved by Underwriters' Laboratories



Patented

These fittings can be used as either a tee or parallel tap two-way connector, or elbow. Each tap has a wide range of cable sizes. The one-piece design—no detachable parts — allows easy assembly to main and branch.

In this listing, the Main indicates the size of cable running through the tap, the Branch the size of cable to be connected to the main.

Cat. No.	Cable Size—Main	Cable Size—Branch	Unit Quan.	Price Per 100
35003	1/0 to 4/0	2 Sol. & Str. to 1	6	$221.00
35005	1/0 to 4/0	1/0 to 4/0	6	260.00
35007	4/0 to 300†	2 Sol. & Str. to 1/0	6	260.00
35009	4/0 to 300†	2/0 to 300 MCM	6	370.00
35011	300 to 500†	2 Sol. & Str. to 3/0	6	435.00
35013	300 to 500†	4/0 to 500 MCM	6	555.00
35015	500 to 750†	2 Sol. & Str. to 3/0	3	665.00
35017	500 to 750†	4/0 to 500 MCM	3	850.00
35019*	500 to 750†	500 to 750 MCM	3	1030.00
35021	750 to 1000†	2 Sol. & Str. to 3/0	3	675.00
35023	750 to 1000†	4/0 to 500 MCM	3	825.00
35025*	750 to 1000†	500 to 750 MCM	3	945.00
35027*	750 to 1000†	750 to 1000 MCM	3	995.00

*These sizes supplied with two clamping screws instead of as illustrated.

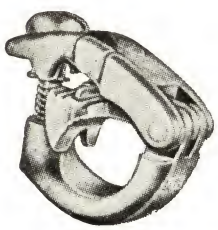
†MCM.

T & B "HINJON" JUNIOR TEE-PARALLEL TAP

For Mains No. 8 to 1000 MCM—For Small Wire Branches No. 14 to No. 1

Approved by Underwriters' Laboratories

The T&B Hinjon Junior is compact, small and easy to tape. Twelve fittings take the entire range of sizes shown above. Self-adjusting jaws grip main and branch cable all around providing a perfect electrical and mechanical connection. To make a tee tap, just bend the branch.

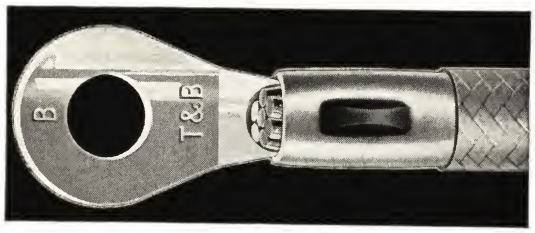


Patented

Cat. No.	Cable Size—Main	Cable Size—Branch	Price Per 100
35107	8 to No. 4	14 to 8	$116.00
35108	8 to No. 4	8 to 4	125.00
35109	4 to 1/0	14 to 4	138.00
35110	4 to 1/0	4 to 1	165.00
35111	1/0 to 4/0	14 to 4	195.00
35112	1/0 to 4/0	8 to 1	210.00
35113	4/0 to 300 MCM	14 to 4	235.00
35114	4/0 to 300 MCM	8 to 1	255.00
35115	300 to 500 MCM	14 to 4	320.00
35116	300 to 500 MCM	8 to 1	390.00
35118	500 to 750 MCM	14 to 1	490.00
35120	750 to 1000 MCM	14 to 1	675.00

T & B STA-KON PRESSURE TERMINALS–INSULATED CONNECTORS

Approved by Underwriters' Laboratories



Patented

There is a variety of Sta-Kon terminals made for each wire size from #22 to 250 M.C.M. Commercial AWG.

A secure mechanical grip on the wire is produced by the pressure of the stake-mark which runs parallel to the strands. Once installed, the Sta-Kon becomes a part of the wire itself. A highly conductive electrical connection is the result.

The Sta-Kon terminal has an electrolytic copper tongue that comes into direct contact with the wire. The complete terminal is hot-tinned.

The Sta-Kon hand or power operated tools apply the staking pressure, making an immediate electrical connection, which is mechanically as strong as the wire itself.

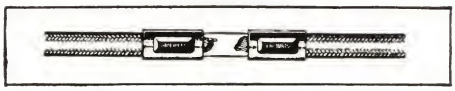
Cat. No.	Wire Size (Com'l AWG)	Std. Pkg.	Unit Quan.	Bolt Size	Price Per 100
Standard Series—For use with Stock Tools No. WT-111M and No. WT-115					
A18-6	#22 to #18	1000	100	#6, #4	$2.95
A18-10	#22 to #18	1000	100	#10, #8	2.95
A18-14	#22 to #18	1000	100	1/4	2.95
B14-6	#20, #14	2000	100	#6, #4	2.95
B14-10	#20, #14	2000	100	#10, #8	2.95
B14-14	#20, #14	2000	100	1/4	2.95
C10-6	#16, #10	1000	50	#6, #4	4.00
C10-10	#16, #10	1000	50	#10, #8	4.00
C10-14	#16, #10	1000	50	1/4	4.00
C10-516	#16, #10	1000	50	5/16	4.00
D8-10	#9, #8, #7	500	25	#10, #8	8.00
D8-14	#9, #8, #7	500	25	1/4	8.00
D8-516	#9, #8, #7	500	25	5/16	8.00
E6-14	#6, #5	200	20	1/4	8.80
E6-516	#6, #5	200	20	5/16	8.80
E6-38	#6, #5	200	20	3/8	8.80
F4-14	#4, #3	200	20	1/4	12.00
F4-516	#4, #3	200	20	5/16	12.00
F4-38	#4, #3	200	20	3/8	12.00
G1-14	#1	100	10	1/4	20.00
G1-516	#1	100	10	5/16	20.00
G1-38	#1	100	10	3/8	20.00
G2-14	#2	100	10	1/4	20.00
G2-516	#2	100	10	5/16	20.00
G2-38	#2	100	10	3/8	20.00
Standard Series for Larger Wires—For Use with No. WT-127 and Power Tools					
H10-14	1/0	100	10	1/4	25.50
J20-38	2/0	100	10	3/8	28.75
K30-38	3/0	50	5	3/8	33.50
L40-38	4/0	50	5	3/8	43.25
M250-38	250 MCM	50	5	3/8	49.50

T & B STA-KON CONNECTORS

Approved by Underwriters' Laboratories and Other Approved Authorities

STA-KON TWO-WAY CONNECTORS

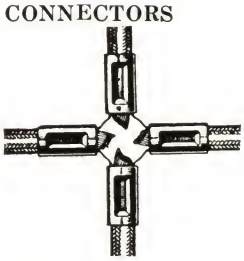
For Use with Stock Tools WT-111M and WT-115



Cat. No.	Wire Size (Com'l AWG) Each End	Std. Pkg.	Unit Quan.	Wt. Lbs. Per 1000	Price Per 100
2A 18	#22 to #18	1000	100	2½	**$4.50**
2B 14	#20, #14	1000	100	3½	**4.50**
2C 10	#16, #10	500	50	7	**6.40**
2D 8	#9, #8, #7	250	25	19	**11.50**
2E 6	#6, #5	200	20	27	**12.50**
2F 4	#4, #3	150	15	38	**15.20**

STA-KON FOUR-WAY CONNECTORS

For Use with Stock Tool WT-111M



For use with Standard (A.W.G.) Code Wire. Will also fit any type or size of wire that will go in the barrel.

For three-way connectors remove one branch with cutting pliers.

Cat. No.	Wire Size (Com'l AGW) Each End	Std. Pkg.	Unit Quan.	Wt. Lbs. Per 1000	Price Per 100
4A 18	#22 to #18	500	50	5	**$10.60**
4B 14	#20, #14	500	50	6	**10.60**
4C 10	#16, #10	500	25	13	**13.30**

Sta-Kon Pigtail Connectors—Inquiries are invited for Sta-Kon connectors for pigtailing or connecting wire ends.

STA-KON WIRE JOINTS



PT-66



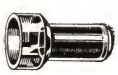
PT-60



PT-70

Maximum capacity 3 No. 12 wires, solid or stranded. Approved by Underwriters' Laboratories for circuit and fixture splices. Installs with standard WT-111M Sta-Kon hand tool.

Cat. No.	Description	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 1000	Price Per 100
PT-66	Complete Joint	100	1000	8½	**$6.40**
PT-60	Connector only	100	1000	6	**2.70**
PT-6	Insulator only	100	1000	2½	**3.70**
	Without Ears for Use with Tape				
PT-70	Connector only	200	2000	6	**2.70**



STA-KON ONE-PIECE INSULATED PIGTAIL SPLICE

For Use with No. WT-105M Tool

Cat. No.	Wire Size	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
RB-44	2 #14 or #16 3 #18, etc.....	100	1000	1.3	**$3.70**
RC-55	3 #14 or 4 #16, etc.....	50	500	2.5	**4.50**

STA-KON 2-WAY INSULATED CONNECTORS

For Use with WT-105M Tool



Cat. No.	Wire Size Each End	Unit Quan.	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
2B-16	2 #16	100	1000	2	**$4.00**
2C-12	2 #12	100	1000	3	**4.95**
RB-25	2 #16	1000	Bulk	..	**3.60**
RC-26	2 #12	1000	Bulk	..	**4.45**

T & B STA-KON TOOLS

STA-KON HAND TOOLS



No. WT-111-M



No. WT-115

Simple, fast operating and well balanced. Head of drop forged steel.

Cat. No.	Installs Terminals for Wire Sizes	Color of Handle	Std. Pkg.	Wt. Lbs. Each	Price Each
WT-110M	#22 to #10	Green	1	¾	**$3.50**
WT-111M	#22 to #10	Red	1	¾	**3.00**
WT-115	# 8 to # 1	Black	1	3½	**18.00**
WT-105M	For RB-44, RB-65 Splice	White	1	¾	**4.50**



RATCHET TOOL

With one nest.

Cat. No.	Installs Terminals For Wire Sizes	Std. Pkg.	Wt. Lbs. Each	Price Each
WT-127G	#2, #1			
WT-127H	1/0			
WT-127J	2/0	1	12	**$50.00**
WT-127K	3/0			
WT-127L	4/0			
WT-127M	250MCM	1	10	**45.00**

SHURE STAKE TOOL

Toggle type hand tool with pawl which guarantees perfect 'Sta-Kon" Installations.



Work cannot be removed until stake is properly completed. Cushion grip handles.

Cat. No.	Installs Terminals For Wire Sizes	Color of Handle	Std. Pkg.	Wt. Lbs. Each	Price Each
WT-130	#22 to #10	Red	1	3	**$12.00**



No. WT-116

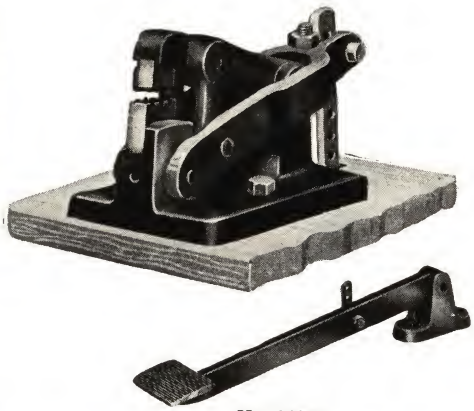
BENCH ADAPTER

For hand tools, WT-115 or WT-127.

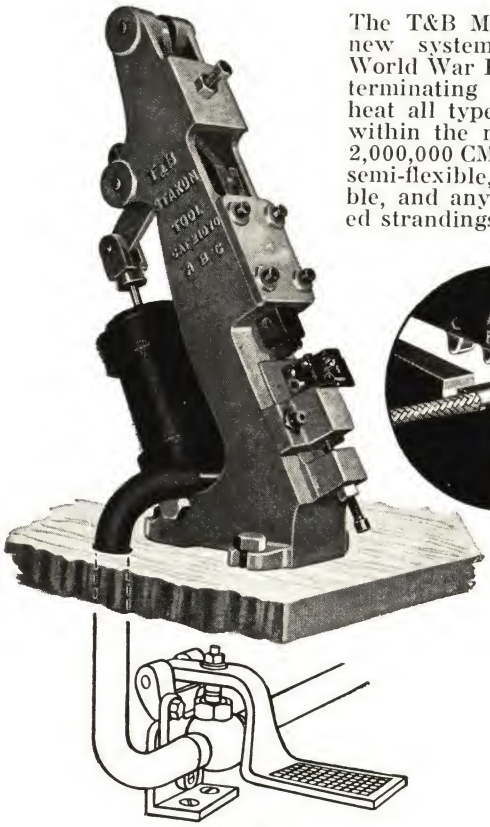
Cat. No.	Std. Pkg.	Wt. Lbs. Each	Price Each
WT116	1	2½	**$2.00**

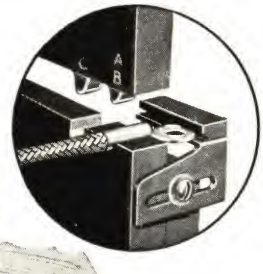
T & B PRODUCTION LINE TOOLS

The T&B Method is a relatively new system, developed during World War II, for connecting and terminating without solder or heat all types of stranded cables within the range No. 8 AWG to 2,000,000 CM—standard stranded, semi-flexible, flexible, extra flexible, and any especially engineered strandings.

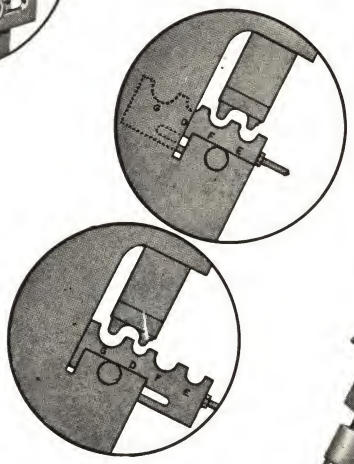


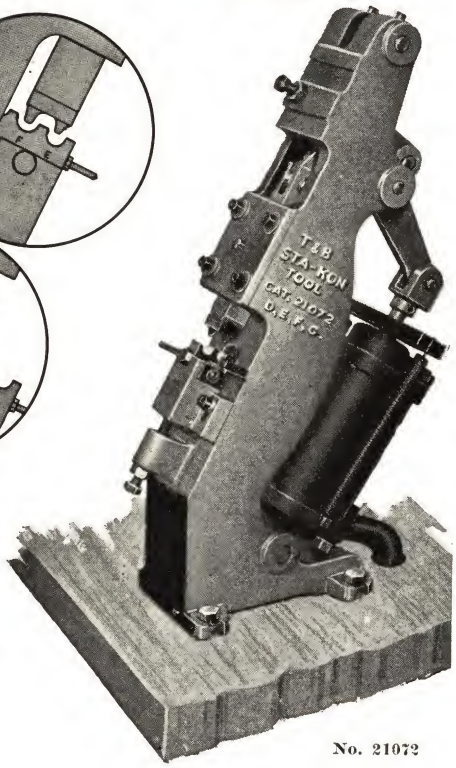
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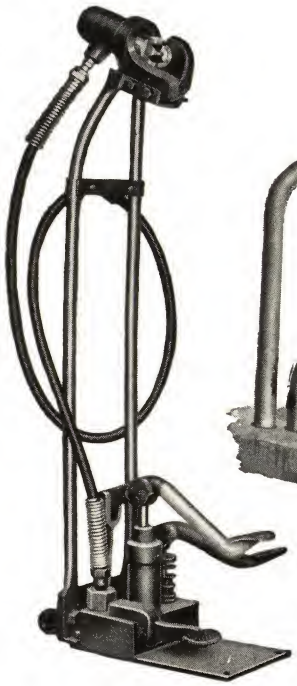


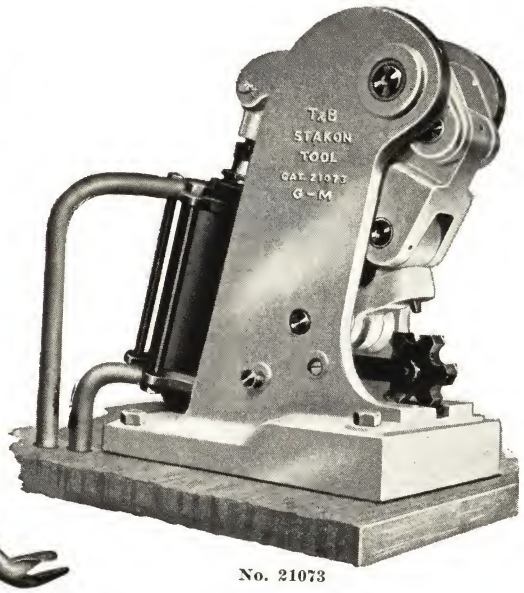
No. 21070





No. 21072





No. 21073

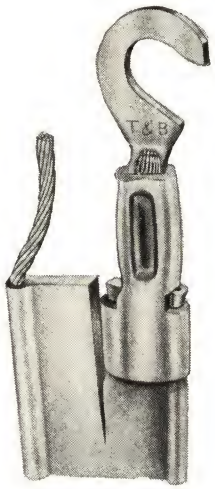
No. 21075

For high-speed production installation, there is a broad line of power tools available, hydraulic or air actuated. They make consistently uniform installations at speeds up to one thousand per hour. Complete details will be furnished on request.



No. 21079

T & B STA-KON TELEVISION HOOK TERMINALS



For dual conductor plastic ribbon lead-in.

Cat. No.	Wire Size	Price Per 100
A18-6TV	.025–.046	$3.50
A18-10TV	.025–.046	3.50

Weight pounds per 100, 2½.

Carton quantity, 100.

Standard package, 1000.

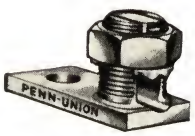
PENN-UNION LUGS

TYPE FE TERMINAL LUGS



Cat. No.	Cable Size	Price Each	Cat. No.	Cable Size	Price Each
14467	6	$0.35	13734	750,000	$3.20
14490	4/0	.90	13746	1,000,000	3.70
14493	250,000	1.10	13766	2,000,000	6.70
14508	500,000	1.70	.....	.....	.....

TERMINAL LUGS—TYPE ZE



Cat. No.	Cable Range From	Cable Range To	Price Each
ZE-1	14	6	$0.20
ZE-8	8	3	.35
ZE-16	4	1/0	.45
ZE-18	4	2/0	.55
ZE-24	6	4/0	.75
ZE-28	2	250,000	.95
ZE-41	250,000	500,000	1.45
ZE-46	350,000	750,000	2.30
ZE-48	500,000	1,000,000	2.80

VI-TITE TERMINAL LUGS

Cat. No.	Cable Range From	Cable Range To	Price Each
21761	8	6	$0.40
21764	4	1	.50
21767	2	1/0	.65
21773	1/0	4/0	.85
21779	3/0	300 M	1.05
21784	300 M	500 M	1.55
21789	500 M	800 M	2.50
21794	700 M	1000 M	3.20



PENN-UNION COPPER SERVICE CONNECTORS

POWER AND SERVICE ENTRANCE TYPES



An electrical and mechanical solderless connection for making solderless line taps, on primary, secondary, service and transformer lines.



Power Type

Cat. No.	Solid Copper	Stranded Copper	Copperweld Type A	Std. Pkg.	Shpg. Wt. Lbs. Per 100
*S-10-S	10	10	.....	100	3
*S-8-S	8	8	.....	100	4
SEL-8-S	8	8	.....	100	4
*S-6-S	6	8	8 A	100	7
SEL-6-S	6	8	8 A	100	7
*S-4-S	4	6	6 A	100	9
SEL-4-S	4	6	6 A	100	9
*S-3-S	2	4	4 A	100	11
SEL-3-S	2	4	4 A	100	11
*S-2-S	1	2	.....	100	14
SEL-2-S	1	2	.....	100	15
*S-1/0-S	....	1/0	2 A	50	20
*S-2/0-S	....	2/0	.....	25	25
*S-3/0-S	....	3/0	.....	25	35
*S-4/0-S	....	4/0	.....	25	45
*S-250-S	....	250 MCM	.....	25	50
S-350-S	....	350 MCM	.....	1	75
S-500-S	....	500 MCM	.....	1	100
S-750-S	....	750 MCM	.....	1	150
S-1000-S	....	1000 MCM	.....	1	300
Service Entrance Type					
SX-12	....	12	.....	200	1
SX-10-8	....	10–8	.....	100	2
SX-6	....	6	.....	100	3
SX-4	....	4	.....	100	4
SX-2	....	2	.....	100	6

*Underwriters' Laboratories Approved. Prices on request.

PENN-UNION SOLDERLESS LUGS

TWO-HOLE SINGLE-COLLAR TYPE



The two-hole tangs prevent lugs from turning. Once mounted straight they stay straight. Like Single-Hole Double-Collar Solderless Lugs, these have the same characteristics and merits as standard solderless lugs, plus extra features.

Offset-Tang Type

Cat. No.	Amp. Rating	Max. Wire	Min. Wire	Wt. Lbs. Per 1000	Price Per 1000
E- 35	35	6	14	37	$121.90
E- 70	70	2	8	67	182.40
E-125	125	0	2	162	303.60
E-225	225	0000	00	380	849.60
E-400	400	500 Mcm	250 Mcm	1222	2632.55
E-650	650	1000 Mcm	600 Mcm	2472	4987.90
Straight-Tang Type					
H- 35	35	6	14	32	121.90
H- 70	70	2	8	58	182.40
H-125	125	0	2	137	303.60
H-225	225	0000	00	305	849.60
H-400	400	500 Mcm	250 Mcm	980	2632.55
H-650	650	1000 Mcm	600 Mcm	2056	4987.90

PENN-UNION SOLDERLESS LUGS



Style SLU



Style SLS

Simple to apply, strong in assembly. Will handle both solid and stranded wires gripped in "V" slot in seamless body and without danger of wire cutting, as contact screw does not bear directly on wires to secure pressure. Listed as Approved by Underwriters' Laboratories.

Style SLU — Offset Shank

Cat. No.	Amp. Rating	Max. Wire	Min. Wire	Carton	Wt.Lbs. Per 1000	Price Per 1000
SLU-25	25	10	14	250	12	$ 89.00
SLU-35	35	6	14	250	22	99.50
SLU-70	70	2	8	200	50	141.00
SLU-125	125	0	2	100	105	234.00
SLU-225	225	4/0	2/0	Bulk	240	651.50
SLU-400	400	500 Mcm	250 Mcm	Bulk	794	1638.00
SLU-650	650	1000 Mcm	600 Mcm	Bulk	2000	3860.00

Style SLS — Straight Shank

SLS-25	25	10	14	250	9½	89.00
SLS-35	35	6	14	250	20	99.50
SLS-70	70	2	8	200	44	141.00
SLS-125	125	0	2	100	96	234.00
SLS-225	225	4/0	2/0	Bulk	208	651.50
SLS-400	400	500 Mcm	250 Mcm	Bulk	669	1638.00
SLS-650	650	1000 Mcm	600 Mcm	Bulk	1893	3860.00

PENN-UNION SOLDERING LUGS

APPROVED STANDARD SINGLE-HOLE TYPE

Side-Formed



Wire size stamped on each lug; also ampere rating. See at a glance the right lug to use.

Flat contact surfaces, free from burrs. Clean, bright finish. Solder very readily. Made of pure electrolytic seamless copper tubing.

***With Round-End Tangs**

Size In.	Amp. Rating N.E.C.	Max. Stranded Wire B&S Gauge	Approx. Wt.Lbs. Per 1000	No. of Pieces Carton	Prices Per 1000 Pieces Less Carton	Carton	1000
1/8	25	10	4	250	$29.60	$23.60	$19.60
1/4	35	8	6	200	34.80	27.80	23.20
1/8	50	6	12	200	53.60	42.80	35.60
3/8	70	4	17	125	60.00	48.00	40.00
1/8	90	2	27	100	82.00	65.60	54.60
1/2	125	0	37	100	106.20	85.00	70.80
1/8	150	00	50	100	136.60	109.20	91.00
5/8	175	000	65	50	188.80	151.00	125.80
1/8	225	0000	85	50	236.00	188.80	157.40
1/8	250	250 Mcm	140	25	464.80	371.80	309.80

With Square-End Tangs

					Less 25 Pieces	25 Pieces	100 Pieces
1/8	325	400 Mcm	240	25	690.00	552.00	460.00
1	362	450 Mcm	310	25	870.00	696.00	580.00
1 1/8	400	500 Mcm	362	25	1083.00	866.40	722.00
1 1/8	450	600 Mcm	425	25	1146.00	916.80	764.00
1 1/8	550	800 Mcm	700	25	1815.00	1452.00	1210.00
1 1/8	650	1,000 Mcm	800	25	2034.00	1627.20	1356.00
1 3/4	850	1,500 Mcm	1500	25	3543.00	2834.40	2362.00
2 1/8	1050	2,000 Mcm	2625	25	5736.00	4588.80	3824.00

*25 to 250 amp. lugs will be furnished with round ends unless otherwise specified.

IDEAL "WIRE-NUTS"

SOLDERLESS—TAPELESS WIRE CONNECTORS

Underwriters Approved



1. Strip wire. 2. Screw on — that's all. "Wire-Nut" threads on to wire just like a nut on a bolt. The coil shaped spring insert presses (does not cut) clean threads into the stripped wires as the Connector is applied. Wires are tightly compressed and automatically twisted together by powerful grip. Molded composition shell completely protects against shorts, grounds and corrosion such as develop in loose solder and tape connections. Millions in use. Listed by Underwriters' Laboratories, Inc. A size for every need — solid or stranded.

Cat. No.	Size		Price Per 100	Price Per 1000
30-015	71B	No. 16 & No. 18 up to 3 No. 18; 1 No. 16 & 1 No. 18	Bulk	**$12.72**
30-017	73B	No. 14, 16 & 18 AWG up to 2 No. 14 and 1 No. 18 or 5 No. 18	**$1.98**	**18.14**
30-018	74B	No. 12, 14, 16 & 18 AWG up to 2 No. 12 and 1 No. 18; 4 No. 14 and 1 No. 18	**2.42**	**22.00**
30-019	76B	No. 10, 12, 14, 16 and 18 AWG up to 3 No. 10 with 1 No. 18; 4 No. 12 with 2 No. 18; 6 No. 14 with 2 No. 18	**4.52**	**41.26**
30-183	83	Hi-Volt, approved up to 600V.; 2 No. 18 to 2 No. 14 and 1 No. 18	Bulk	**20.36**

EXCEL PORCELAIN WIRE CONNECTOR

Approved by Underwriters' Laboratories, Inc. Made in one piece, high grade porcelain.

Perfect for roughing in fixture hanging and many other electrical connections.

No. E-3 30-008 (small size) joins combinations of solid and stranded wires up to and including 2 No. 18 and 2 No. 14.
Price, No. **30-008**....per 100 **$1.54**; per 1000..**$13.76**

No. E-5 (large size) joins combinations of solid and stranded wires up to and including 4 No. 14.
Price, No. **30-009**....per 100 **$1.76**; per 1000..**$15.74**

SET SCREW WIRE CONNECTORS



Underwriters' Laboratories approved for 600 volts, and as pressure cable connectors.

Cat. No.	Description	Price Per 100	Price Per 1000
30–211	No. 11, 2#12–3#14 1#12+2#12	**$9.80**	**$91.88**
30–222	No. 22, 2#10–3#12–5#14 2#12+1#12–2#12+2#14	**13.80**	**129.38**

BUCHANAN "pres-SURE" CONNECTORS for ELECTRICAL WIRING



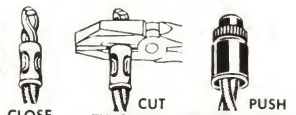
BUCHANAN pres-SURE-connectors have established new high standards for electrical wiring efficiency. These tool saving, time saving pres-SURE-connectors insure permanent trouble-free splices and wire terminations on either solid or stranded, or combinations of solid and stranded wires

The **BUCHANAN Splice Caps,** with **Insulators** eliminate costly, bulky solder equipment and danger of shorts and grounds from punctured tape on soldered joints or from loose 'fixture type' connectors.

The companion **'Termend' Lugs,** installed with same pres-SURE-tool, provide for both single and multiple wire terminations.

Always safe . . . Always **SURE** . . . low in overall installed cost—for peak efficiency, it's BUCHANAN 'all the way'.

A COMPLETELY INSULATED SPLICE IN 3 SIMPLE STEPS



A PERFECT WIRE TERMINATION IN 1 EASY OPERATION

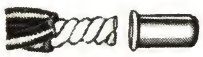


Check these outstanding Features and Advantages:

1. **Broader range of wire sizes** — one Buchanan pres-SURE-connector does the work of two, three, or four conventional solder or solderless devices.
2. **No maintenance required** — no loosening in service . . . no joint crystallization.
3. **Maximum electrical conductivity** — insured by one-piece all-copper construction.
4. **Vibration-proof, high-strength connections** — assured by exclusive 4-way pres-SURE-crimp.
5. **Maximum resistance to wire abrasion** — provided by smooth bell-mouthed wire openings.
6. **Fewer Installation Tools required**— . . . one pres-SURE-tool for all most frequently used wire sizes . . . same pres-SURE-tool installs both 'Splice Caps' and 'Termends'.
7. **Perfect "pigtail" joint insulation** — insured by plastic snap-on Splice Cap Insulator with constant insulation thickness.
8. **Instantaneous visual inspection** — provided by red security ring on Splice Cap Insulator . . . If ring is in locking position, it's a satisfactory installation.

BUCHANAN "pres-SURE" CONNECTORS for ELECTRICAL WIRING

SPLICE CAPS



with INSULATORS for 2 #18 to 3 #8



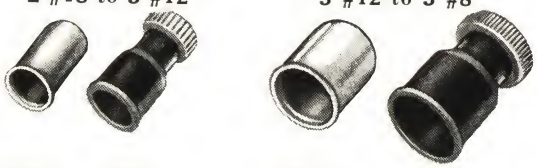
TERMEND LUGS for 1 #16 to 1 #8



ONLY 2 SPLICE CAPS
for all wire combinations from 2 #18 to 3 #8



2 #18 to 3 #12 — **3 #12 to 3 #8**



2004S 2005 2011S 2012

Splice Caps

Cat. No.	For Wire Sizes	Use Tool No.	Unit Pkg.	Shpg. Wt. Lbs. Per 1000	Price Per 100
2001S	2-20 to 2-14	C22A	1000	1	**$0.40**
2004S	2-18 to 3-12	C24	500	2¼	**1.00**
2011S	3-12 to 3- 8	C24	250	4¾	**2.10**

Splice Cap Insulators

2005	For No. 2004S Splice Cap	500	3½	**1.50**
2012	For No. 2011S Splice Cap	250	7½	**3.10**

ONLY 1 "TERMEND" for all wire sizes from #16 to #8





Ring Tongue **Spade Tongue** **Locking Tongue**

For Stud Size	Catalog Nos.* Ring Tongue	Spade Tongue	Locking Tongue	Use Tool No.	Shpg. Wt.Lbs. Per M	Price Per 100
#6	16-8-6	16-8-6S	16-8-6L	C24	4	**$2.50**
#8	16-8-8	16-8-8S	16-8-8L	C24	3⅞	**2.50**
#10	16-8-10	16-8-10S	16-8-10L	C24	3¾	**2.50**
¼"	16-8-¼	----------	----------	C24	4¼	**2.50**

* All for (1) #16 to (1) #8 wire.
Unit package — 250.

All Splice Caps & Termends fully approved by UNDERWRITERS' LABORATORIES, Inc. & CANADIAN STANDARDS ASSOCIATION.

CSA APPROVAL NUMBER 8306

MUELLER UNIVERSAL CLIPS

Screw or lug connections; no solder required; channel construction throughout; polarity indications + for positive, plain for negative.



No. 48-B



No. 24-A

Cat. No.	Description	Length of Clip	Spread of Jaws	Price Each
11	200 amp., solid copper Clip with lug	6″	1¾″	$1.28
11-A	100 amp., Clip, with lug, steel, lead plated	6″	1¾″	.84
21	100 amp., solid copper Clip with lug	4½″	1¼″	.65
21-A	50 amp., Clip with screw, steel, lead plated	4″	1¼″	.24
22	Twin-Clip with screw, steel, cadmium plated	2″	1½″	.10
24	50 amp., solid copper Clip with screw	2⅞″	1″	.26
24-A	25 amp., Clip with screw, steel, lead plated	2⅞″	1″	.15
27	20 amp., Clip with screw, steel, cadmium plated	2 7/16″	⅝″	.11
27-C	40 amp., solid copper Clip with screw	2 7/16″	⅝″	.19
33	300 amp., solid copper Clip with lug	7¾″	2″	2.25
45	Pee-Wee Clip with screw, steel, cadmium plated	1½″	⅜″	.07
45-C	Solid copper Clip with brass screw, phosphor bronze spring	1½″	¼″	.11
48-B	Clip with screw, steel cadmium plated	2″	½″	.08
48-C	Solid copper Clip, with screw	2″	½″	.13
50-C	Needle Clip, solid bronze, with screw	2¼″	½″	.23
51-C	Solid Bronze Clip with screw	2¼″	½″	.16
88	Pee-Wee phosphor bronze Clip	1 11/16″	¼″	.18
95	Clip with screw, steel, cadmium plated	2″	½″	.08

Packed 10 in a box; 100 in a standard carton.

ALLIGATOR AND CROCODILE CLIPS



No. 60-HS Alligator Clip



No. 85 Crocodile Clip

Cat. No.	Description	Price Each
60	Alligator Clip, steel, solder connection	$0.07
60-S	Alligator Clip, steel, screw connection	.08
60-HS	Alligator Clip, steel, insulated handle, screw connection	.13
60-CS	Alligator Clip, solid copper, screw connection	.11
60-CHS	Alligator Clip, solid copper, insulated handle, screw connection	.15
85	Crocodile Clip, steel, screw connection, cadmium plated	.08
85-C	Crocodile Clip, solid copper, brass screw, bronze spring	.13
85-T	Crocodile "Tip-Clip," steel, screw connection, cadmium plated	.18

Packed 10 in a box; 100 in a standard carton.

MUELLER UNIVERSAL CLIPS

CLIP INSULATORS



No. 27 Clip with No. 29 Insulator

Cat. No.	Description	Price Each
13	Flexible Ins. for Clips 11, 11-A	$0.63
23	Flexible Ins. for Clips 21, 21-A	.35
26	Flexible Ins. for Clips 24, 24-A	.25
29	Flexible Ins. for Clips 27, 27-C	.17
35	Flexible Ins. for Clip 33	1.63
47	Flexible Ins. for Clips 45, 45-C	.09
49	Flexible Ins. for Clips 48B, 48C, 50C, 51C	.11
74	7MM. Flexible Insulator for Clip 95	.15
87	Flexible Ins. for Clips 85, 85-C and 85-T	.08
90	7MM. Fexible Insulator for Clip 27	.17
93-P	Plastic Insulator for Clip 88	.05

UNIVERSAL CLAY PRODUCTS

ALL PORCELAIN WIREHOLDERS



Made of high quality dry process, brown glaze porceplain. Designed so that there are no metal parts exposed to the weather after installation. Screws securely leaded into base of the insulator. Suitable for many types of installations, such as, service connections, dead ends, lamp leads, and radio work.

Standard package 50.

Cat. No.	Insulator Dimen., In. Dia.	Insulator Dimen., In. Hgth.	Wire Hole Dia., In.	Screw Size	Wt. Lbs. Per 100
409	1 13/32	2	½	*14x1½	25
410	2	2 29/32	⅝x 25/32	*20x1⅞	65
410-B	2	2 29/32	⅝x 25/32	†20x2	65
413	2 13/32	3 5/32	¼ x⅞	*20x2 3/16	95
413-B	2 13/32	3 5/32	¼x⅞	†20x2 3/16	95
414	2⅝	3⅝	1	*20x2⅛	125
414-B	2⅝	3⅝	1	†20x2⅛	125

*Zinc plated wood screw. †Brass wood screw.

WIREHOLDER HOUSE BRACKETS





Standard package 25.

Cat. No.	Number Wires	Wire Spacing Inches	Insulator Furnished	Wt. Lbs. Per 100
302	2	9	§2—No. 510	240
303	3	4½	§3—No. 510	275
402	2	9	‡2—No. 511	295
403	3	4½	‡3—No. 511	375

§No. 410 with stud and cork washer. ‡No. 413 with stud and cork washer.

UNIVERSAL CLAY PRODUCTS

PORCELAIN KNOBS

No. 5½ Solid Knob With or Without Nail—Glazed



Height, inches	1¾
Diameter, inches	1⅛
Hole, inches	¼
Wire Size	12–14
Standard Package:	
Barrel	3000
Carton	100
Weight per 1000, lbs.	165

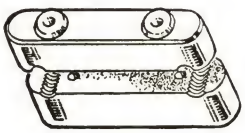
Nail Knob—Glazed or Unglazed Assembled with 12d. Nails



Height, inches	1¾
Diameter, inches	1⅛
Hole, inches	¼
Wire Size	12–14
Standard Package:	
Barrel	2700
Carton	100
Weight per 1000, lbs.	165

STANDARD CLEATS

2-Wire and 3-Wire



Cat. No.	No. Wires	Size Wire	Dimen., In. Wdth.	Dimen., In. Lgth.	Wt. Lbs. M Pair
334	2	12-14	⅝	3⅜	220
337	3	12-14	⅝	3⅜	220

Unglazed furnished unless otherwise requested.

PORCELAIN TUBES

Unglazed



Length Inches	Size Hole Inches	Outside Diam. Inches	Std. Pkg.	Wt. Lbs. Per 1000	Price Per 1000 Pieces
2	5/16	9/16	7000	45	**$20.90**
2½	5/16	9/16	5500	58	**23.10**
3	5/16	9/16	4500	62	**25.30**
4	5/16	9/16	3600	80	**33.00**
5	5/16	9/16	2900	100	**42.90**
6	5/16	9/16	2000	118	**55.00**
3	3/8	11/16	3100	107	**33.00**
4	3/8	11/16	2000	117	**44.00**
5	3/8	11/16	1900	142	**55.00**
6	3/8	11/16	1500	183	**66.00**
8	3/8	11/16	1200	225	**115.50**
4	1	1 7/16	550	436	**184.80**
5	1	1 7/16	500	440	**204.60**
6	1	1 7/16	450	489	**224.40**
8	1	1 7/16	400	525	**264.00**
10	1	1 7/16	280	750	**412.50**

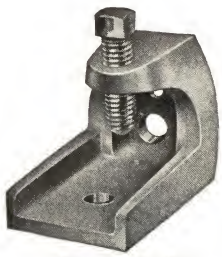
UNIVERSAL INSULATOR SUPPORTS



No. 500 **No. 501** **No. 502**



No. 503



No. 505 and 506

These supports are malleable iron clamps (cadmium plated, electro-galvanized or sherardized) fitted with cup-pointed case-hardened steel set screws for securing porcelain and glass insulators, knobs, cleats, brackets or pipe to exposed steel framework in all classes of structures.

They are easily attached to the flanges of structural steel shapes such as I-beams, angles, channels, Z-bars, etc., also to round, square or flat bars, edges of tanks and plates, pipes, etc., at great saving of labor and material.

Universal Insulator Supports are of the one-set-screw design, providing a 3-point contact that holds the support securely and rigidly to the steel framework. They are easily and quickly installed, as a wrench can be used freely to tighten the extra large set-screw that exerts a bull-dog grip that will not loosen regardless of the amount of vibration.

Screw holes for fastening insulator to Universal Insulator Supports are tapped standard as indicated. Special tapping can be specified when required.

Machine screws for fastening porcelain insulators to Universal Insulator Supports are furnished only when specified and at additional cost.

Leather washers are furnished with the supports at no additional cost.

Cat. No.	Size In.	Jaw Opening Inch	*Standard Tapping	Std. Pkg.	Wt. Lbs. Per 100
500	1	¾	¼—20	100	20
509	1	¾	10—24	100	20
501	1½	¾	⅜—18	100	50
502	2	⅞	⅜—16	100	86
503	2½	⅞	½—13	50	150
505	1½	¾	10—24 & ⅜" Clear.	100	75
506	2	1	10—24 ½—13	100	117
507	2½	1¼	½—13	50	150
508	2½	2	½—13	50	188

*All supports can be tapped as specified without extra charge.

KELLEMS SUPPORT GRIPS

Kellems Support and Riser Grips are made of tin coated bronze. Also available in stainless steel for severe conditions.



CLOSED GRIPS

Used for new installation and where end of cable is available.

For Cable Diam. In.	Double Eye Closed Cat. No.	Price Each	Single Eye Closed Cat. No.	Price Each
¾ to 1	R075	$1.90	R075-U	$1.90
1 to 1¼	R100	2.50	R100-U	2.50
1¼ to 1½	R125	2.80	R125-U	2.80
1½ to 1¾	R150	3.20	R150-U	3.20
1¾ to 2	R175	3.80	R175-U	3.90
2 to 2½	R200	4.30	R200-U	4.50
2½ to 3	R250	4.80	R250-U	5.05
3 to 3½	R300	5.40	R300-U	5.90
3½ to 4	R350	5.90	R350-U	6.40

SPLIT GRIPS

With tin coated bronze lacing used where end of cable is not available.



For Cable Diam., In.	Double Eye Split Cat. No.	Price Each	Single Eye Split Cat. No.	Price Each
¾ to 1	RS075	$2.10	RS075-U	$2.10
1 to 1¼	RS100	2.70	RS100-U	2.70
1¼ to 1½	RS125	3.00	RS125-U	3.00
1½ to 1¾	RS150	3.40	RS150-U	3.40
1¾ to 2	RS175	4.05	RS175-U	4.15
2 to 2½	RS200	4.55	RS200-U	4.75
2½ to 3	RS250	5.05	RS250-U	5.30
3 to 3½	RS300	5.70	RS300-U	6.15
3½ to 4	RS350	6.20	RS350-U	6.65



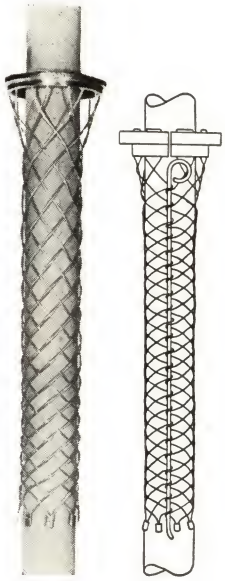
SPLIT GRIPS

Closed with a rod. Faster installation, with factory skill replacing on-the-job lacing.

For Cable Diam., In.	Double Eye Split Cat. No.	Price Each	Single Eye Split Cat. No.	Price Each
¾ to 1	RR075	$2.15	RR075-U	$2.15
1 to 1¼	RR100	2.75	RR100-U	2.75
1¼ to 1½	RR125	3.05	RR125-U	3.05
1½ to 1¾	RR150	3.45	RR150-U	3.45
1¾ to 2	RR175	4.10	RR175-U	4.15
2 to 2½	RR200	4.60	RR200-U	4.80
2½ to 3	RR250	5.10	RR250-U	5.35
3 to 3½	RR300	5.75	RR300-U	6.20
3½ to 4	RR350	6.25	RR350-U	6.70

KELLEMS SUPPORT GRIPS

CONDUIT RISER GRIPS



Kellems Conduit Riser Grip is made of tin-coated bronze wire with a tin-coated bronze Ring that seats on the end of the conduit. The Grip slips inside the conduit. A cap or bushing can be threaded on the conduit over the Ring. The perfect support for riser cable in conduit. Made in Single or Double Weave Closed, and Double Weave Split (with lacing) or Single Weave Split (with Rod Closing). In ordering give conduit size and cable size.

The catalog number is made up of Conduit Size (C-2) plus Type Designation (R) plus Grip Size (100), thus C2-R100, **$2.70.**

Conduit Size	Add Ring Extra	Grip Size	Base Price Type Designation Single Weave -R	Double Weave -RD	Split Lacing -RS	Rod Closing -RR
C 1¼-	$0.00					
C 1½-	.00	075	$2.10	$2.60	$2.90	$2.50
C 2 -	.10	100	2.70	3.30	3.60	3.10
C 2½-	.20	125	3.00	3.60	3.90	3.50
C 3 -	.25	150	3.40	4.00	4.30	4.00
C 3½-	.30	175	3.90	4.60	4.90	4.40
C 4 -	.40	200	4.20	5.20	5.60	4.80
C 4½-	.50	250	4.70	5.90	6.30	5.50
C 5 -	.60	300	4.90	6.20	6.60	5.70
C 6 -	.90	350	5.40	7.00	7.40	6.20

KELLEMS SERVICE DROP GRIPS



The "Concentric" support for modern service cable, round or oval.

Cat. No.	For Cable Diam., In.	Price Each	Cat. No.	For Cable Diam., In.	Price Each
SD 4	.23-.31	$0.20	SD11	.64- .75	$0.42
SD 5	.29-.37	.22	SD12	.70- .81	.43
SD 6	.35-.44	.24	SD13	.75- .87	.44
SD 7	.41-.50	.26	SD14	.81- .94	.46
SD 8	.46-.56	.34	SD15	.87-1.00	.48
SD 9	.52-.62	.40	SD16	.94-1.06	.52
SD10	.58-.68	.41	SD17	1.00-1.18	.56

KESTER SOLDER



KESTER ACID-CORE SOLDER

The first Acid-Core Solder — KESTER — the original Flux-Core Solder in the service field. The Kester alloy, that is the percentage of tin and lead, is exactly what you, the user, established as "standard" long ago. 1-lb., 5-lb., 20-lb. spools.

KESTER "RESIN-FIVE" CORE SOLDER

Contains the "stimulated" type of Resin Flux — very active yet non-corrosive and non-conductive — UL Approved. Used generally on radio, television and electronic assemblies. 1-lb., 5-lb., 20-lb. spools.





KESTER SOLID WIRE SOLDER

Uniform in gauge and alloy. The same high quality in metals and fabrication found in Kester Flux-Core solders. Every spool carries positive alloy identification. 1-lb., 5-lb., 20-lb. spools and 50-lb. reels.

KESTER RADIO SOLDER

The smaller unit of Kester Plastic Rosin-Core Solder; an ideal package for the Radio Serviceman.

Comes in display carton of 10 boxes.





KESTER PLASTIC ROSIN-CORE SOLDER

For soldering of electrical, radio and television parts, electronic equipment — everything electrical — this product is the "old stand-by" in the market. Non-corrosive and non-conductive. UL Approved. 1-lb. spool, 5-lb. spool, 20-lb. spool.

KESTER SOLDER



KESTER METAL MENDER

The "handy-size" unit of Kester Acid-Core Solder — a "tool-kit" package. 10 coils, each in an individual box, 10 boxes to the display carton. Ideal for those "up front sales" for the user whose solder requirements are small.

Display carton of 10 boxes.

KESTER BAR SOLDER



Best of metals used. Definite alloy-marking. Easy flowing. Convenient and easy to handle bars that average 1 lb. each.



KESTER SOLDERING PASTE

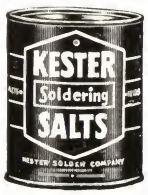
An improved Soldering Paste due to new manufacturing methods. More uniform. Every portion alike in fluxing strength. No failures with Kester, a perfect job everytime.

Display carton of 10 2-oz. cans; 1-lb. can; 5-lb. cans; 50-lb. pail.

KESTER SOLDERING PASTE

Uniform in fluxing strength. Processed in such a way that the active ingredients are evenly distributed throughout the paste-body. 1-lb., 5-lb., 10-lb., 50-lb. containers.





KESTER SOLDERING SALTS

For producing flux of any desired strength. Merely mix with proper volume of water. Used widely in radiator work or wherever a separate or externally applied flux is needed along with solid wire or bar solder. 1-lb., 5-lb., 50-lb. containers.

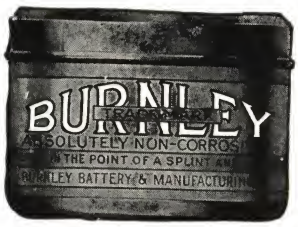
KESTER TINNING BLOCK

Replaces ordinary sal-ammoniac, cleans and "tins" soldering irons or coppers very speedily. Will not crumble or cause any undue corrosion on the work. Available in convenient sizes — any quantity can be ordered. ½-lb. size; 1-lb. size.



BURNLEY SOLDERING MATERIAL

SOLDERING PASTE



Size Can	No. in Carton	Up to 1 Gross Per Doz.	Price per Gross 1 Gross Lots	Price per Gross 2 Gross & Over
2 Oz.	1 & 3 doz.	$1.40	$12.50	$12.00
4 Oz.	3 doz.	1.90	17.50	17.00

		Price per Pound Up to 25 Lbs.	Price per Pound 25 Lbs. to 100	Price per Pound 100 Lbs. & Over
½ Lb.	25 or 50	$0.44	$0.40	$0.39
1 Lb.	25 or 50	.41	.37	.36
5 Lbs.	Any Qty.	.37	.34	.33

	50 Lbs.	100 Lbs. & Over
50 Lb. Pails	$0.29	$0.27
Steel Drums—Bulk 500 Lbs.	.....	.23

Two ounce cans Soldering Paste are put up in display cartons of 1 and 3 dozen cans.

Two and four ounce sizes may be assorted, the combined quantity entitles purchaser to the **Total Quantity** price on each size.

Assorted ½ pound and 1 pound sizes for quantity prices.

SOLDERING SALTS



Size Can Lbs.	Std. Pkg.	Price per Pound Up to 25 Lbs.	Price per Pound 25 Lbs. to 100	Price per Pound 100 Lbs. & Over
½	25 or 50	$0.63	$0.61	$0.60
1	25 or 50	.53	.52	.50
5	Any Qty.	.44	.43	.42

	50 Lbs.	100 Lbs. & Over
50 Lb. Pails	$0.31	$0.30

HEWITT SPECIALLY PROCESSED SOLDER

The result of continuous research through applied science in the development of Solder Alloys for increased efficiency in soldering operations. Hewitt Laboratory-controlled Solders are universally acclaimed for their economical and satisfactory performance.



ACID CORE SOLDER

A wire solder with a 35% tin content. Available in 1, 5 and 20-lb. spools.

ROSIN CORE SOLDER

A wire solder with a 40% tin content. Available in 1, 5 and 20-lb. spools.



X-WIPING SOLDER



A very high grade plumbers' wiping solder purposely made 40% tin to meet all requirements. For certain wiping, lead may be added to suit individual applications. Maximum plastic range. Available in 1½-lb. bars and 5-lb. cakes.

HEWITT BAR SOLDER



Available in 1½ lbs. or ½ lb. bars in all grades.

DUTCH BRAND TAPE

"JUMBO" SHOP PACKAGE DUTCH BRAND FRICTION TAPE



For the convenience of repairmen, electrical contractors, industrial users and wherever individually cartoned tape is not required.

Package contains 10 regular No. 8 rolls Dutch Brand Friction Tape intended primarily for shop use. Carries the same long-life guarantee as Dutch Brand Friction Tape individually cartoned.

"Jumbo" Shop Package	Approx. Shpg. Wt.	Price Per Pkg.
10 No. 8 Rolls	5 lbs.	$7.00

DUTCH BRAND TAPE

DUTCH BRAND FRICTION TAPE



Dutch Brand Friction Tape is an "Extra Service" product. High grade, dependable, non-raveling with exceptional insulating qualities. Resists up to 2000 volts through one thickness, is strong, sticks tight, and lasts longer in any climate.

Size Rolls	Std. Pkg. Contains	Price Per Roll
No. 1	16 Rolls	**$0.12**
No. 2	16 Rolls	**.22**
No. 4	12 Rolls	**.40**
No. 8	6 Rolls	**.70**

DUTCH BRAND RUBBER TAPE



Dutch Brand Rubber Tape is the perfect splicing compound. Stretches readily, fuses perfectly, resists up to 18,000 volts through a single thickness and contains no corrosive chemicals.

Size Rolls	Description	Price Per Roll
No. 2	Dutch Brand Rubber Tape	**$0.23**
No. 4	Dutch Brand Rubber Tape	**.40**
No. 8	Dutch Brand Rubber Tape	**.70**

"HIPPO" SHOP PACKAGE RUBBER INSULATING TAPE

Electrical contractors, repairmen, and industrial users of rubber tape will find the "Hippo" shop package convenient and more economical because the cost of individual cartons is eliminated. The package is furnished as a complete unit of 10 regular No. 8 rolls Dutch Brand Rubber Tape.



"Hippo" Shop Package	Approx. Shpg. Wt.	Price Per Pkg.
10 No. 8 Rolls	5 lbs.	**$7.00**

DUTCH BRAND TAPE

DUTCH BRAND DEFENDER FRICTION TAPE



Use for general commercial purposes. It will stick and last under all climatic conditions — will not dry out. Tough, strong, durable — a reliable electrical insulator. Will not unravel.

Defender Friction Tape contains 60 feet in each No. 8 roll compared with 68 feet in each No. 8 roll of Dutch Brand Friction tape.

Individual Cartons in Display Cartons

Size Rolls	Rolls in Display Carton	Price Each
No. 1	32	**$0.12**
No. 2	16	**.22**
No. 4	12	**.38**
No. 8	6	**.65**

Individual Cartons Not in Display Cartons

Size Rolls	Rolls in Display Carton	Price Each
No. 4	----	**$0.38**
No. 8	----	**.65**

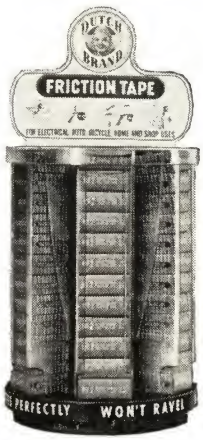
SENIOR FRICTION TAPE DISPENSER

Contains 24 rolls No. 1, 24 rolls No. 2, 12 rolls No. 4 and 12 rolls No. 8 Dutch Brand Friction Tape—a well balanced assortment. Ideal for electrical supply and appliance stores, automotive accessory stores, hardware and variety stores, service stations, etc.

Sturdily built of clear plastic. Every carton plainly visible. Revolves easily. Occupies small counter space.



Description	Approx. Shpg. Wt.	Consumer Price (Contents Only)
Senior Dispenser with Tape	19 lbs.	**$21.36**



JUNIOR FRICTION TAPE DISPENSER

Contains 36 rolls of No. 1 and 36 rolls of No. 2 Dutch Brand Friction Tape. Designed for service stations, hardware stores, variety stores, etc.

Sign at top shows many tape uses. Sturdily built of clear plastic, every carton plainly visible. Occupies very small counter space.

Description	Approx. Shpg. Wt.	Consumer Price (Contents Only)
Junior Dispenser with Tape	12 lbs.	**$12.24**

DUTCH BRAND TAPE

DUTCH BRAND MASKING TAPE



Straight, sharp and clean edges. Thin — limits paint build up. Will not pull loose or wrinkle when applied around windows, louvers, etc.

Extreme flexibility, goes around curves readily. Will not break in use, yet is torn easily off roll to lengths required. Waterproof. Holds firmly to all clean, dry surfaces, will not loosen under spray gun pressure.

Unaffected by heat or cold. Paint colors do not penetrate. No staining.

60 Yd. Rolls Wdth. In.	Price Per Roll	60 Yd. Rolls Wdth. In.	Price Per Roll
¼	$1.11	1	$2.22
⅜	1.28	1¼	2.78
½	1.46	1½	3.33
⅝	1.62	1¾	3.88
¾	1.77	2	4.44
⅞	2.01		

PLASTIX ELECTRICAL TAPE

Master Shop Package

UL Approved



Dutch Brand Plastix Electrical Tape stands up under severest conditions. Resists the action of water, oils, acids, alkalies and corrosive chemicals. It is very thin yet has extra dielectric resistance. It stretches and conforms readily to irregular surfaces — ideal for many special applications in electrical construction and repair.

Width and Length of Rolls	¾ in.—44 ft.
No. of Rolls in Shop Package	5
No. of Shop Packages in Case	10
Approx. Shipping Wt. Per Package	1 lb.

Price, Plastic Electrical Tape.....per roll **$2.00**

"SCOTCH" BRAND ELECTRICAL TAPE

"SCOTCH" No. 33 ELECTRICAL TAPE

With Plastic Backing

Listed Under Reexamination Service of Underwriters' Laboratories, Inc.



This tape has a stretchy, rubber-like plastic backing that enables it to do the work of two ordinary tapes. Goes on in one operation, instead of two, and does a better job. Its stretchability and resistance to oil and moisture equip it perfectly for a wide range of uses in electrical construction and repair. Its thinness gives it an important advantage in eliminating "over-stuffed" junction boxes. Has a dielectric strength of 10,000 volts — only .007 of an inch thick.

This revolutionary Electrical Tape is backed with the same synthetic resin that is used on Type T synthetic insulated wire. It provides complete electrical and mechanical protection.

Scotch No. 33 Electrical Tape	Packing: Type of Packing	Packing: Carton	Price Per Roll
¾" x 66 ft.	1 Roll per Can	12	$1.50
¾" x 20 ft.	12 Rolls per Tube	144	.55

PLASTIC TAPE DISPLAY FOR HOME REPAIRS



The same professional-quality "SCOTCH" No. 33 Electrical Tape is now available for dozens of repair jobs about the home and garage.

This smooth Plastic Tape conforms easily to any shape, sticks at-a-touch and takes the place of bulky old style tapes. Handy for all kinds of indoor and outdoor wiring and other home repair jobs; will not dry out, resists sunlight and weathering, oils, acids, alcohols, and water. Has a dielectric strength of 10,000 volts and carries the seal of Underwriters' Laboratories.

Display No. **196** has twelve ½ x 150-inch rolls of tape.....list value **$4.68**

"SCOTCH" BRAND ELECTRICAL TAPE

"SCOTCH" No. 27 ELECTRICAL TAPE



The glass cloth backing of No. 27 Electrical Tape is not harmed by high temperatures, resists flame, does not shrink, stretch or rot; has extremely high tensile strength — 150 pounds per inch of width. Curing of the thermosetting adhesive increases dielectric strength about 500 volts and harms none of the other electrical properties.

Packing: 1—½-inch x 66 ft. roll per can, 12 cans per carton.

Price, No. **27** "Scotch" Electrical Tape .....per roll **$1.75**

JOB SIZE "SCOTCH" No. 33 ELECTRICAL TAPE

Listed Under Reexamination Service of Underwriters' Laboratories, Inc.



Twelve "Job Size" twenty-foot rolls of "Scotch" No. 33 Electrical Tape in a strong tube with a metal screw cap. Each roll is a convenient one day supply for an electrician with a steady schedule of wiring assignments. Electricians like the twenty-foot roll because it is easy to use and easy to carry. Has a dielectric strength of 10,000 volts — only .007 of an inch thick.

Packing: 12—¾-inch x 20 ft. roll per tube; 144 rolls (12 tubes) per carton.

Price, No. **33** "Scotch" Electrical Tape per Job Size Roll.....**$0.55**

"SCOTCH" ELECTRICAL TAPE No. 22



Used for heavy-duty powerhouse and industrial construction and maintenance on account of its high mechanical strength and dielectric strength — over 10,000 volts. It is backed with the same tough, stretchy plastic as No. 33, but the backing is thicker (.010 inch). It also has the stretchiness and ability to conform to irregular surfaces, characteristics of No. 33.

Size	Price Each 1 Roll	Price Each 12 Rolls
½ inch x 36 yds.	**$1.95**	**$1.76**
¾ inch x 36 yds.	**2.40**	**2.16**
1 inch x 36 yds.	**3.00**	**2.70**
2 inches x 36 yds.	**6.00**	**5.40**

MINERALLAC INSULATING COMPOUNDS

For Use in Cable Joints, Potheads and Terminal Bells

HIGH VOLTAGE COMPOUNDS



No. 1. A compound having the consistency of molasses. Not affected by moisture. Effective in drying out tape, cloth, and between layers of such materials when wound on high-voltage electrical apparatus.

No. 2A. Cable joint or pothead compound. Melting point 82 degrees C. Adheres to metal or porcelain; especially suitable for use in warm climates.

No. 64. For use in mild climates where there is no great variation in temperature. A hard compound, with a melting point of approximately 93 degrees C.

No. 78. Cable joint or pothead compound. Dense and very adhesive. Recommended as an all-purpose insulating material. For voltages 6,000 and up. Melting point 90 degrees C. Dielectric strength 940 volts per mil at 30 degrees C.

No. 80. Pothead compound for use on 6,000 volts and over. Melting point 130 degrees C. Tests 990 volts per mil at 30 degrees C.

No. 104. A semi-solid compound for use in cable joints on high voltage lines over 6,000. Melting point 50 degrees C. Dielectric strength averages 800 volts per mil at 30 degrees C.

No. 104A. Same general characteristics as No. 104, except it has a lower melting point (35 degrees C.).

INSULATING COMPOUNDS

For high and low voltage cable joints, potheads, junction boxes, end bells, etc.

Container Size	Quantity in Gal.	Compound Number 1#	#2-A	#33	#85 #64	#20- #78 #80-#104 #104A
½ Gal	Any	**$2.80**	**$3.30**	**$3.80**	**$2.60**	**$2.50**
1 Gal.	1–9	**2.30**	**2.80**	**3.30**	**2.10**	**2.00**
	10–49	**2.20**	**2.70**	**3.20**	**2.00**	**1.80**
	50–149	**2.10**	**2.60**	**3.10**	**1.90**	**1.60**
	Over 150	**2.00**	**2.50**	**3.00**	**1.80**	**1.40**
2 Gal.	2–8	**2.25**	**2.75**	**3.25**	**2.05**	**1.70**
	10–48	**2.15**	**2.65**	**3.15**	**1.95**	**1.50**
	50–148	**2.05**	**2.55**	**3.05**	**1.85**	**1.30**
	Over 150	**1.95**	**2.45**	**2.95**	**1.75**	**1.10**
5 Gal.	5	**2.10**	**2.60**	**3.10**	**1.90**	**1.55**
	10–45	**2.00**	**2.50**	**3.00**	**1.80**	**1.30**
	50–145	**1.90**	**2.40**	**2.90**	**1.70**	**1.10**
	Over 150	**1.80**	**2.30**	**2.80**	**1.60**	**.90**
Steel Drums Approx. 400 Lb.	50 and Over	**1.80**	**2.30**	**2.80**	**1.60**	**.90**

For compound in less than ½-gallon container, use the ½-gallon price plus 50 per cent.

Approximate shipping weight, 10 lbs. 1 gallon. Shipments f.o.b. Chicago, Illinois.

SUGGESTED STANDARDS OF ADEQUATE RESIDENTIAL WIRING

Recommendations based on Standard published in The Handbook of Residential Wiring Design, A.I.A. File No. 31-C-61.

Incorporated in the Standards are references to tables indicating the devices suggested for the particular installation. The tables in the right hand column of this particular section illustrate a selection of devices ordinarily recommended for residential use. Additional devices may be found for many of the applications by reference to the main body of the catalog.

BASIC HOME WIRING SPECIFICATIONS

ENTRANCES, PORCHES, TERRACES, PATIOS, ETC.

Lighting and Switch Outlets: One ceiling outlet or one or two wall outlets outside front and trade entrances with switch control. (Table No. 1)

On covered porches, one lighting outlet for each 150 sq. ft. (or major fraction thereof) of porch area with inside switch control. (Table No. 1)

Convenience Outlets: At front entrance, one for the porch outlet (Table No. 3), located approximately 18 in. above grade, with inside switch control. (Table No. 1)

Convenience outlets on porches, terraces and patios placed so that there will be one outlet for each 15 linear ft. (or major fraction thereof) of house wall bordering said porch or terrace. (Table No. 3)

HALLS AND STAIRWAYS

Lighting and Switch Outlets: One lighting outlet for each 15 linear ft. (or major fraction thereof) of hallway, with switch control. (Table No. 1)

For stairways, one lighting outlet on each floor, one to illuminate the head and the other, the foot of the stairway. Each outlet to have separate multiple switch control at the head and foot of stairway. (Table No. 1)

Convenience Outlets: One convenience outlet for each 15 linear ft. (or major fraction thereof) of hallways, measured along the center line. (Table No. 2)

LIVING ROOMS, BEDROOMS, RECEPTION HALL, LIBRARY, DEN, SUN ROOM, RECREATION ROOM, ENCLOSED PORCHES, ETC.

Lighting and Switch Outlets: One ceiling outlet with switch control (Table No. 1); rooms of a length more than twice the width to have two ceiling outlets.

The ceiling outlets may be omitted, provided wall, cove or valance outlets with wall switch control, are substituted.

Where there is more than one principal entrance to the room, each entrance to be equipped with multiple switch controls at the lock side of doors or the traffic side of arches; should this result in the placing of switches within 10 ft. of each other, one of the switch locations may be eliminated. (Table No. 1)

Convenience Outlets: Convenience outlets placed so that no point along the floor line in any usable wall space, unbroken by a doorway, is more than 6 ft. from an outlet in that space. At least one convenience outlet in every usable wall space 3 ft. or more in length. (Table No. 2)

Two or more convenience outlets to be wall switch controlled. (Table No. 1)

When construction permits, one convenience outlet placed flush in the mantel shelf. (Table No. 2)

TABLES OF SUGGESTED DEVICES

TABLE No. 1
FLUSH SWITCHES

PORCELAIN CUP TYPE



Single Pole, "T" Rating



Three-way, "T" Rating

BAKELITE CUP TYPE



Single Pole, "T" Rating



Three-way, "T" Rating

MERCURY SILENT TYPE



Single Pole, "T" Rating



Three-way, "T" Rating

Switches can be furnished with Brown or Ivory handles.

SUGGESTED STANDARDS OF ADEQUATE RESIDENTIAL WIRING—Continued

DINING ROOM, DINETTE, BREAKFAST ROOM, BREAKFAST NOOK, ETC.

Lighting and Switch Outlets: One ceiling outlet in each room, controlled by a wall switch. (Table No. 1)

Where there is more than one principal entrance to the room, each entrance to be equipped with multiple switch controls at the lock side of doors or the traffic side of arches; should this result in the placing of switches within 10 ft. of each other, one of the switch locations may be eliminated. (Table No. 1)

Lighting outlets may be desired for decorative or subdued type of lighting. Cove and valance lighting are of this type. These outlets to be controlled from wall switches, placed at convenient locations. (Table No. 1)

Convenience Outlets: Convenience outlets placed so that no point along the floor line in any usable wall space, unbroken by a doorway, is more than 10 ft. from an outlet in that space. At least one convenience outlet provided in every usable wall space 3 ft. or more in length. (Table No. 2)

In dinette, breakfast rooms, or other small dining areas, one of the required outlets to be placed adjacent to the table and slightly above table height. In dining rooms, place one of the required outlets at a location on the wall as near the hostess' chair as possible. (Table No. 2)

A floor outlet under the table is desirable in large dining rooms.

KITCHEN, KITCHENETTE, PANTRY

Lighting and Switch Outlets: One ceiling outlet for general illumination with wall switch control. At the sink location a lighting outlet to be provided with a wall switch control. (Table No. 1)

Where there is more than one principal entrance to the room, each entrance to be equipped with multiple switch controls at the lock side of doors or the traffic side of arches; should this result in the placing of switches within 10 ft. of each other, one of the switch locations may be eliminated. (Table No. 1)

For work counters under wall cabinets, provide cabinet lighting, with switch controls on the individual lighting units.

Convenience Outlets: One outlet for every 4 linear foot frontage of kitchen work surface, placing outlets for greatest convenience. By kitchen work surface is meant all the work area, exclusive of the cooking range and sink. If work areas are divided by space, provide at least one outlet at each such area. (Table No. 2)

Special Purpose Outlets: Provide an outlet at each of the following locations:

Refrigerator	(Table No. 2)
Dishwasher	(Table No. 2)
Waste-Away	(Table No. 2)
Clock	(Table No. 5)
Ventilating Fan	(Table No. 2)
Roaster	(Table No. 2)
Range	(Table No. 9)

TABLE No. 2
CONVENIENCE OUTLETS



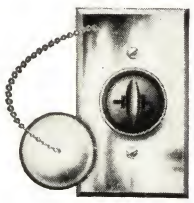
"T" Slot



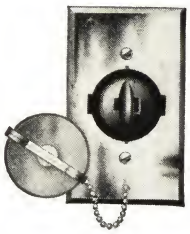
Parallel Slot

Can be furnished in Brown or Ivory.

TABLE No. 3
WEATHERPROOF CONVENIENCE OUTLETS

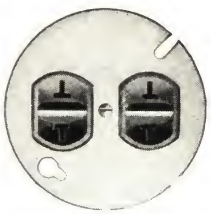


With Thread-on Cover

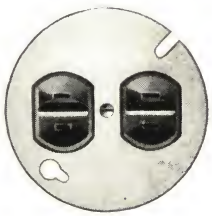


With Quick-Clamp Cover

TABLE No. 4
BOX COVER OUTLETS



"T" Slot



Parallel Slot

TABLE No. 5
CLOCK OUTLETS



Brass



Bakelite

Can be furnished in Brown or Ivory.

SUGGESTED STANDARDS OF ADEQUATE RESIDENTIAL WIRING — Continued

BATHROOMS AND LAVATORIES

Lighting and Switch Outlets: A ceiling outlet provided at each side of the mirror with a wall switch control. (Table No. 1)

A ceiling outlet in completely enclosed shower compartments, controlled by a switch outside the compartment. (Table No. 1)

Bathrooms having an area of 60 sq. ft. or greater to be equipped with a ceiling outlet having a wall switch control. (Table No. 1)

Convenience Outlets: A convenience outlet near the mirror to be provided at a height of from 3 to 4 ft. (Table No. 2)

Special Purpose Outlets: An outlet to be provided for a bathroom heater. (Table No. 10)

CLOSETS

Lighting Outlets: An outlet for lighting provided in each closet 3 ft. or more deep, or having a floor area of 10 sq. ft. or more. Control by means of an automatic door switch (Table No. 12) is desirable; otherwise, a pull chain lampholder may be supplied. (Table No. 11)

LAUNDRY OR LAUNDRY SECTION

Lighting and Switch Outlets: A ceiling or wall outlet at laundry tubs or washing center and one ceiling or wall outlet at ironing center (Table No. 11). Provisions to be made for wall switch control of one of these outlets (Table No. 1); the remaining outlets may be equipped with pull-chain control fixtures. (Table No. 11)

Special Purpose Outlets: Outlets provided for each of the following pieces of equipment:

Automatic Washer Clothes Dryer Ironer	(Table No. 10)
Hand Iron	(Table No. 2)

BASEMENT

Lighting and Switch Outlets: One outlet provided for each enclosed space, one for local illumination of the work bench, and one at the furnace location, outlets to be pull-chain controlled (Table No. 11), or provided with wall switches. (Table No. 1)

Sufficient additional outlets to be provided by adding one outlet for each 150 sq. ft. of open space, the outlets being either pull-chain controlled (Table No. 11), or wall switch controlled. (Table No. 1)

Convenience Outlets: One convenience outlet located at the work bench and another at the furnace. (Table No. 4)

UNFINISHED ATTIC

Lighting and Switch Outlets: Provide at least one outlet (Table No. 11), wall switch and pilot light controlled. (Table No. 7)

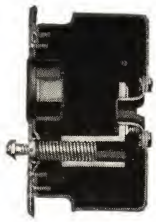
Additional lighting outlets for each enclosed space, pull-chain controlled (Table No. 11)

Convenience Outlets: At least one convenience outlet for general use. (Table No. 2 or No. 4)

TABLE No. 6
FAN HANGER OUTLETS



Stud Mounting



Sectional View Stud Mounting Type

Can be furnished in yoke mounting.

TABLE No. 7
PILOT LIGHT OUTLET

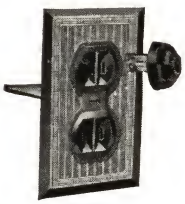


Pilot Light

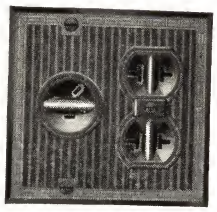


Single Pole Switch

TABLE No. 8
RADIO OUTLETS



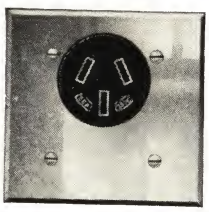
Radio and Power Outlet Assembly



Radio and Two Power Outlet Assembly

Can be furnished in Brown or Ivory.

TABLE No. 9
RANGE CONNECTING OUTLETS



Flush



Surface

SUGGESTED STANDARDS OF ADEQUATE RESIDENTIAL WIRING — Continued

GARAGE

Lighting and Switch Outlets: One ceiling outlet (Table No. 11) for each one or two-car garage with wall switch control. (Table No. 1)

Where there is more than one principal entrance to the garage, each entrance to be equipped with multiple switch controls at the lock side of doors; should this result in the placing of switches within 10 ft. of each other, one of the switch locations may be eliminated. (Table No. 1)

Where garage is detached from residence, provide an exterior outlet, multiple switch controlled, from garage and residence. (Table No. 1)

Convenience Outlets: One convenience outlet for each one or two car garage, outlet located approximately 48 in. above floor. (Table No. 2 or No. 4)

RECREATION ROOM

Lighting and Switch Outlets: One ceiling outlet for each 150 sq. ft. of floor area with wall switch control. (Table No. 1)

Ceiling outlets may be omitted, provided wall, cove or valance lighting outlets are substituted, with wall switch control.

Where there is more than one principal entrance to the room, each entrance to be equipped with multiple switch controls at the lock side of doors or the traffic side of arches; should this result in the placing of switches within 10 ft. of each other, one of the switch locations may be eliminated. (Table No. 1)

Convenience Outlets: Convenience outlets so placed that no point along the floor line in any usable wall space, unbroken by a doorway, is more than 10 ft. from an outlet in that space. At least one convenience outlet in every usable wall space 3 ft. or more in length. (Table No. 2)

Where construction permits, a convenience outlet flush in the mantel shelf. (Table No. 2)

RECEPTION HALL

Lighting and Switch Outlets: One ceiling outlet provided with wall switch control. (Table No. 1)

The ceiling outlet may be omitted, provided wall, cove or valance lighting outlets, wall switch controlled, are substituted.

Where there is more than one principal entrance to the room, each entrance to be equipped with multiple switch controls at the lock side of doors or the traffic side of arches; should this result in the placing of switches within 10 ft. of each other, one of the switch locations may be eliminated. (Table No. 1)

Convenience Outlets: Convenience outlets so placed that no point along the floor line in any usable wall space, unbroken by a doorway, is more than 10 ft. from an outlet in that space. At least one convenience outlet in every usable wall space 3 ft. or more in length. (Table No. 2)

Where construction permits, a convenience outlet flush in the mantel shelf. (Table No. 2)

TABLE No. 10
GROUNDED CONVENIENCE OUTLETS



Non-metallic and Metallic



Non-metallic and Metallic, 20 Ampere

TABLE No. 11
PORCELAIN LIGHTING OUTLETS



Pull Chain with Convenience Outlet

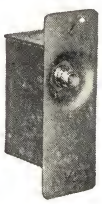


Chain and Cord



Keyless

TABLE No. 12
DOOR SWITCH



"On" when door is open

SUGGESTED STANDARDS OF ADEQUATE RESIDENTIAL WIRING — Continued

PLATES FOR SWITCHES AND CONVENIENCE OUTLETS

Bakelite plates for tumbler switches (Table No. 13) and for convenience outlets (Table No. 14).

Metal plates for tumbler switches (Table No. 13) and for convenience outlets (Table No. 14) should be not less than .040" in thickness.

BRANCH CIRCUITS

Unless otherwise governed by existing regulations, the number of circuits to supply the lighting outlets in all rooms and all convenience outlets except those listed below, should be determined by providing one circuit for every 500 square feet of floor area of the house. (The floor area is computed from the outside dimensions of the house and should include all areas except open porches and unfinished spaces in the basement and attic.) Outlets supplied by these circuits should be divided as equally as possible.

Minimum wire size shall be #14 and careful consideration should be given to the need of #12 wire for situations where the distances from the distribution panel to the outlets is considerable.

The convenience outlets in the kitchen (or kitchenette), breakfast room, pantry, dining room (or dinette), and the convenience outlets in the laundry should be supplied by **at least two 20 ampere circuits.** The wiring for such circuits to be so installed that outlets from both circuits are available in both the kitchen and the laundry. For residences with floor area in excess of 1500 sq. ft., provide one 20 ampere circuit for the kitchen, pantry, breakfast room and dining room receptacles; one 20 ampere circuit for the convenience outlets in the laundry, and one 20 ampere circuit for convenience outlets in both the kitchen and the laundry. The wire size for these 20 ampere circuits should be not less than No. 12.

RANGE CIRCUITS

For ranges up to 8500 watts, three No. 10 wires will be satisfactory if the length of the circuit does not exceed 35 ft. For greater lengths, the circuit shall not be smaller than two No. 8 and one No. 10 wire.

For ranges 8750 watts and greater in rating, two No. 8 and one No. 10 wire may be used up to 50 ft. in length.

The wires shall be carried to the range location and terminated in the wall or floor in accordance with local regulations covering such connections.

SPECIAL PURPOSE CIRCUITS

Heaters: Circuits of at least two #10 wires should be carried to suitable locations for each heavy duty heating unit planned for the kitchen, laundry or bathroom.

Water Pump Motor: Where pressure water service is not available, two #12 wires should be carried to the pumping system location and terminated at the motor control apparatus.

Oil Burner or Stoker: If an oil burner or automatic stoker is to be installed, a circuit consisting of two #12 conductors should be carried to the furnace room for connection to the apparatus. Emergency switch control should be provided at cellar entrance.

Air Conditioning Equipment: If central air conditioning is planned, the wiring requirements should be based on the particular equipment chosen. Switch control should be provided.

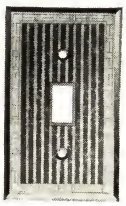
TELEPHONE

At least one outlet box with concealed wiring on each active floor. (Table No. 16)

RADIO OUTLETS

At least three outlets with radio antenna and ground connections and power service in each 6 room or smaller house. Proportionately more in larger houses. The rooms in which such outlets are most often installed are the living room, kitchen, bedrooms and recreation room. (Table No. 8)

TABLE No. 13
FLUSH SWITCH PLATES



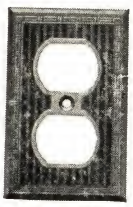
Bakelite



Enameled Steel

Can be furnished in Brown or Ivory.

TABLE No. 14
CONVENIENCE OUTLET PLATES



Bakelite



Enameled Steel

Can be furnished in Brown or Ivory.

TABLE No. 15
PILOT LIGHT PLATES



Bakelite



Enameled Steel

Can be furnished in Brown or Ivory.

TABLE No. 16
TELEPHONE OUTLET PLATE



Bakelite

Can be furnished in Brown or Ivory.

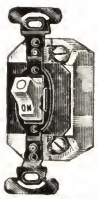
H & H WIRING DEVICES
FLUSH TUMBLER SWITCHES


No. 8601

Porcelain Base, 1-inch

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
8601	Single-Pole	10T	5	10	100	33
8914	Single-Pole	20T	10	10	50	19
8602	Double-Pole	10T	10	10	50	18
8931	Double-Pole	20T	20	2	10	4
8603	Three-Way	10T	5	10	50	18
8913	Three-Way	20	10	2	10	4
8604	Four-Way	5T	2	2	10	4
8660	D.P., D.T.	10	5	10	50	17

With Ivorylite Handles


No. 8601-I

Ivorylite is a white, cream tinted moulded material. Switch handles, receptacles and plates made of Ivorylite harmonize with light interiors and are les conspicuous on walls. The color is solid, moulded throughout. It is not a lnish and will not chip, flake or wear off.

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
8601-I	Single-Pole	10T	5	10	50	16
8914-I	Single-Pole	20T	10	2	10	4
8602-I	Double-Pole	10T	10	10	25	10
8931-I	Double-Pole	20T	20	2	10	4
8603-I	Three-Way	10T	5	10	25	10
8913-I	Three-Way	20	10	2	10	4
8604-I	Four-Way	5T	2	2	10	4


No. 8601-UR

WITH STEEL "U" SHAPE LEVERS

Porcelain Base

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
8601-UR	Single-Pole	10T	5	10	100	25
8602-UR	Double-Pole	10T	10	10	50	20
8603-UR	Three-Way	10T	5	10	50	20
8604-UR	Four-Way	5T	2	2	10	4

LOCK TYPE

Porcelain Base, 1-inch

One No. 5006 key is furnished with each lock switch.


No. 8601-L

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
8601-L	Single-Pole	10T	5	10	100	36
8602-L	Double-Pole	10T	10	10	50	20
8931-L	Double-Pole	20T	20	2	10	4
8603-L	Three-Way	10T	5	10	50	20
8604-L	Four-Way	5T	2	2	10	4
5006	Key for Lock Type	....	..	20	100	1

One Key supplied with each Lock Switch.

H & H WIRING DEVICES
FLUSH TUMBLER SWITCHES

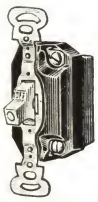

No. 1611

Composition Base, 1-Inch

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
1611	Single-Pole	10T	5	10	50	16
3933	Single-Pole	20T	20	10	20	7
1612	Double-Pole	10T	10	2	10	4
3939	Double-Pole	20T	20	2	10	4
1613	Three-Way	10T	5	10	20	7
8916	Three-Way	20	10	2	10	4
1614	Four-Way	5T	2	2	10	3

With Ivorylite Handles

Composition Base, 1-Inch


No. 1611-I

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
1611-I	Single-Pole	10T	5	10	50	16
3933-I	Single-Pole	20T	20	10	20	8
1612-I	Double-Pole	10T	10	2	10	4
3939-I	Double-Pole	20T	20	2	10	4
1613-I	Three-Way	10T	5	10	20	4
1614-I	Four-Way	5T	2	2	10	3


No. 1611-L

Lock Type

Composition Base

1-Inch

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
1611-L	Single-Pole	10T	5	10	50	16
1612-L	Double-Pole	10T	10	2	10	4
3939-L	Double-Pole	20T	20	2	10	4
1613-L	Three-Way	10T	5	10	20	7
1614-L	Four-Way	5T	2	2	10	3
5006	Key for Lock Type	....	..	20	100	1

One Key Supplied with each Lock Switch.

Round Metal Handle Type

Porcelain Base, 1-Inch


No. 8881

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
8881	Single-Pole	10	5	10	100	36
8917	Single-Pole	20	10	10	50	19
8882	Double-Pole	....	10	10	50	20
8642	Double-Pole	....	20	2	10	6
8883	Three-Way	10	5	10	50	19
8918	Three-Way	20	10	2	10	4
8884	Four-Way	5	2	2	10	4

H & H WIRING DEVICES

SPHINX SWITCHES

Silent, Mercury Break

5 Amp., 250 Volts; 5 Amp., 125 Volts T, AC or DC T Rating 125 Volts Only


No. 821


No. 822

Silent in action, durable and dependable. Sphinx Switches are supplied with brown or Ivorylite Handles. These switches fit standard switch boxes and must be installed vertically. "Top" stamped on mounting ears shows the correct position.

With Brown Handles

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
821	Single-Pole	10	100	19
822	Double-Pole	10	50	14
823	Three-Way	10	50	13
824	Four-Way	2	10	4

With Ivorylite Handles

821-I	Single-Pole	10	50	10
822-I	Double-Pole	10	30	9
823-I	Three-Way	10	30	8
824-I	Four-Way	2	10	4

FLUSH TUMBLER SWITCHES

"T" Rated

With Plaster Ears and Bakelite Base

Completely enclosed mechanism in small Bakelite base, 1 inch deep, 1½ inches long, ⅞ inches wide. End wired for convenience, suitable for No. 10 wire. Ideal for modern residences. Meets REA and Federal specifications.

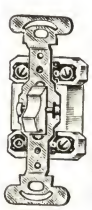
10 Amps., 125 Volts "T"
5 Amps., 250 Volts


No. 1791


No. 1791-I

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
1791	Single-Pole, Brown	10	100	13
1791-I	Single-Pole, Ivorylite	10	100	13
1793	Three-Way, Brown	10	50	7
1793-I	Three-Way, Ivorylite	10	50	7


No. 521


523-I

FLUSH TUMBLER SWITCHES

With Plaster Ears and Porcelain Base

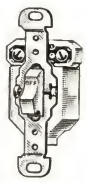
Has sturdy mechanism assembled in porcelain base, convenient binding screws on the top and wide plaster ears.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
521	Single-Pole, Brown	10	100	25
521-I	Single-Pole, Ivorylite	10	100	25
523	Three-Way, Brown	10	50	13
523-I	Three-Way, Ivorylite	10	50	13

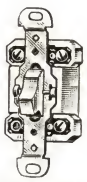
H & H WIRING DEVICES

FLUSH TUMBLER SWITCHES


No. 201


No. 201-I


No. 203


No. 203-I

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
201	Single-Pole, Brown	10	100	25
201-I	Single-Pole, Ivorylite	10	100	25
203	Three-Way, Brown	10	50	14
203-I	Three-Way, Ivorylite	10	50	14

TIMESAVER SINGLE SWITCHES


TL-1

All bakelite, fully enclosed and sealed, making a dust proof tamper proof job. Small, compact and sturdy, with ample wiring room. Designed especially for type C lamp loads. Fits standard tumbler plates.

These switches can also be supplied on order, mounted on 3¼ or 4-inch outlet box covers, at a slight increase for cost of cover.

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
TL-1	Single-Pole	10T	5	10	100	18
TL-2	Double-Pole	10T	10	10	50	8
TL-3	Three-Way	10T	5	10	50	7
TL-4	Four-Way	5T	2	2	10	2

Ivorylite

TL1-I	Single-Pole	10T	5	10	50	9
TL2-I	Double-Pole	10T	10	2	10	2
TL3-I	Three-Way	10T	5	10	30	5
TL4-I	Four-Way	5T	2	2	10	2

LOCK STYLE SINGLE SWITCHES


TL-1 Lock

Keyhole is flush with the plate. Attractive appearance which harmonizes with the lever style. A thoroughly dependable lock switch, operable only with the proper key. Fits standard tumbler plates.

One No. 7908 key is supplied with each lock switch.


Key

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
TL-1 Lock	1-Pole	10T	5	10	100	18
TL-2 Lock	2-Pole	10T	10	10	50	8
TL-3 Lock	3-Way	10T	5	10	50	9
TL-4 Lock	4-Way	5T	2	2	10	2
7908	Key	....	--	1	1	1 oz.

Ivorylite

TL1-I Lock	1-Pole	10T	5	10	50	9
TL2-I Lock	2-Pole	10T	10	2	10	2
TL3-I Lock	3-Way	10T	5	10	30	5
TL4-I Lock	4-Way	5T	2	2	10	2

H & H WIRING DEVICES

HEAVY DUTY TUMBLER SWITCHES

Top Wired — "T" Rated

10 AMPERES, 1 3/8-inch Base



No. 1531



No. 1532

These high quality, Specification Grade Switches give years of satisfactory service. They are available in both 10 and 20 ampere sizes for all standard connections.

With Brown Handles

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
1531	Single-Pole	10T	5	10	50	16
1532	Double-Pole	10T	10	2	10	6
1533	Three-Way	10T	5	10	20	6
1534	Four-Way	5T	2	2	10	3

With Ivorylite Handles

1531-I	Single-Pole	10T	5	10	25	10
1532-I	Double-Pole	10T	10	2	10	3
1533-I	Three-Way	10T	5	2	10	3
1534-I	Four-Way	5T	2	2	10	3

Lock Type

1531-L	Single-Pole	10T	5	10	50	16
1532-L	Double-Pole	10T	10	2	10	3
1533-L	Three-Way	10T	5	2	10	3
1534-L	Four-Way	5T	2	2	10	3
4277	Key	....	..	..	15	5 oz.

One Key is supplied with each Lock Switch.

20 AMPERE

Bakelite Base, 1 1/2-inch

These switches can also be supplied with Ivorylite handles. If desired, add "I" to catalog number.



No. 1541



No. 1542-I

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
1541	Single-Pole	20T	20	10	30	8
1542	Double-Pole	20T	10	2	10	3
1543	Three-Way	20T	20	2	10	3
1544	Four-Way	5T	2	2	10	3
1545	S. P. Quadruple Break	20T	20	2	10	4

With Ivorylite Handles

1541-I	Single-Pole	20T	20	10	30	8
1542-I	Double-Pole	20T	10	2	10	3
1543-I	Three-Way	20T	20	2	10	3
1544-I	Four-Way	5T	2	2	10	3
1545-I	S. P., Quadruple Break	20T	20	2	10	3

Lock Type

1541-L	Single-Pole	20T	20	10	30	8
1542-L	Double-Pole	20T	10	2	10	3
1543-L	Three-Way	20T	20	2	10	3
1544-L	Four-Way	5T	2	2	10	3
1545-L	S. P., Quadruple Break	20T	20	2	10	3
4277	Key	.....	....	2	10	5 oz.

One Key is supplied with each Lock Switch.

H & H WIRING DEVICES

TUMBLER SWITCHES



No. 4281

20 AMPERE

Bakelite Base, 2-inch

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
4281	Single-Pole	20T	20	10	30	12
4282	Double-Pole	20T	20	2	10	4
4283	Three-Way	20T	20	2	10	4
4286	Four-Way	20T	10	2	10	4
4284	S. P., Quadruple Break	20T	20	2	10	4

Lock Type

4281-L	Single-Pole	20T	20	10	30	12
4282-L	Double-Pole	20T	20	2	10	4
4283-L	Three-Way	20T	20	2	10	4
4286-L	Four-Way	20T	10	2	10	4
4284-L	S. P., Quadruple Break	20T	20	2	10	4
4277	Key	.....	....	2	10	5 oz.

30 AMPERE

Bakelite Base, 2-inch



No. 4272

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
4271	Single-Pole	30T	30	10	30	12
4272	Double-Pole	30T	30	2	10	4
4273	Three-Way	30T	30	2	10	4
4274	Four-Way	20T	10	2	10	4
4275	S. P., Quadruple Break	30T	30	2	10	4

Lock Type

4271-L	Single-Pole	30T	30	10	30	12
4272-L	Double-Pole	30T	30	2	10	4
4273-L	Three-Way	30T	30	2	10	4
4274-L	Four-Way	20T	10	2	10	4
4275-L	S. P., Quadruple Break	30T	30	2	10	4
4277	Key	.....	....	2	10	5 oz.


No. 3047

STEEL BOX FOR DOOR SWITCHES

This box is designed to fit switches Nos. 2022 and 2023. Box dimensions, 1 1/4 x 2 7/8 x 2 3/4 inches. 5/8-inch and 7/8-inch knockouts are provided on ends and bottom.

Cat. No.		Carton	Std. Pkg.	Pkg. Wt.
3047	.....	5	25	16

H & H WIRING DEVICES

DOOR SWITCHES

6 Amps., 125 V., 3 Amps., 250 V.


No. 6550


No. 2022


No. 7362


No. 4029

Nos. 6550 and 6551 are rectangular in shape, mounted in a porcelain base, and fit all standard door switch boxes. Hole required: 1 1/16 x 3 3/8 x 1 5/8 inches.

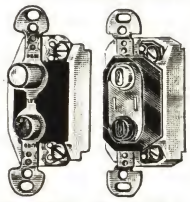
Nos. 2022 and 2023 are mounted in a steel box, porcelain lined. Hole required: 1 1/16 x 2 3/8 x 1 1/2 in.

Nos. 7362 and 7363 are round and are mounted in an outlet box which will take BX or Loom.

Cat. No.	Light is On When Door is	Plate Dimens. Inches	Hole Required Inches W.	L.	D.	Carton	Std. Pkg.	Pkg. Wt.
6550	Open	4 5/8 x 1 1/4	1 1/16	3 3/8	1 5/8	5	25	15
6551	Closed	4 5/8 x 1 1/4	1 1/16	3 3/8	1 5/8	2	10	6
2022	Open	3 3/4 x 1 1/4	1 1/16	2 3/8	1 1/2	5	25	14
2023	Closed	3 3/4 x 1 1/4	1 1/16	2 3/8	1 1/2	2	10	6
7362	Open	2 5/8 x 1 3/8	1 5/16	*	3 1/8	5	25	15
7363	Closed	2 5/8 x 1 3/8	1 5/16	*	3 1/8	2	10	7
4029	Open	4 x 1 1/2	1 13/32	2 1/2	1 7/16	10	100	56
4030	Closed	4 x 1 1/2	1 13/32	2 1/2	1 7/16	10	100	56

*Diameter.

PUSH SWITCHES — PORCELAIN BASE


No. 4401 No. 4401-L

Has 1-inch porcelain base. Metal buttons supplied when specified. Add "M" to catalog number. Price on application. Plaster ears are optional. If desired, add "G" to catalog number.

One No. 5003 key furnished with each lock switch.

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
4401	Single Pole	10	5	10	100	32
8922	Single Pole	20	10	10	50	20
4402	Double Pole	....	10	10	50	18
8620	Double Pole	....	20	2	10	4
4403	Three Way	10	5	10	50	18
8923	Three Way*	20	10	2	10	5
4404	Four Way	5	2	2	10	4
	Lock Type					
4401L	Single Pole	10	5	10	100	32
4402L	Double Pole	....	10	10	50	18
4403L	Three Way	10	5	10	50	4
4404L	Four Way	5	2	2	10	4
5003	Key	....	....	20	100	1

Metal buttons supplied when specified. Add "M" to the catalog number. *1½ inch base.

ROTARY FLUSH SWITCHES

Porcelain Base

Depth 1 9/16 Inches


No. 601

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
601	Single-Pole, Non-Ind...	10	5	2	10	5
602	Double-Pole, Non-Ind.	10	10	2	10	5
603	Three-Way, Non-Ind.	10	5	2	10	5
604	Four-Way, Non-Ind...	5	2	2	10	5
4067	.040-in. Brass Plate....			2	10	2

H & H WIRING DEVICES

PUSH SWITCHES — ELECTROLIER


No. 2967


No. 3511

10 Amp., 125 Volts

5 Amp., 250 Volts

With Indicating Button

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
2967	1, Off, 1&2, Off, 1&2&3, Off	2	10	5
2968	1, Off, 1&2, Off.....	2	10	5
3264	1, Off, 2, Off, 1&2, Off.....	2	10	5

Non-Indicating

3511	1, Off, 1&2, Off, 1&2&3, Off	2	10	4
3512	1, Off, 1&2, Off.....	2	10	4
3513	1, Off, 2, Off, 1&2, Off.....	2	10	5

MOMENTARY CONTACT PUSH SWITCHES

1-Circuit, 1 Push Button, 2 9/16-inch Porcelain Base

These switches have a quick make and break mechanism. The 2-circuit type has two separate single-pole switches, each controlling a separate circuit, but both cannot be operated at the same time. Supplied with metal button regular length if desired. Add "M" to the catalog number. See Price List.

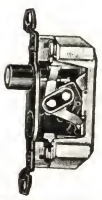

No. 2179

6 Amps., 250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
2179	S. P. Normally Open.....	2	10	6
2179-L	Same, Lock Style	2	10	6
3661	S. P. Normally Closed....	2	10	6
3661-L	Same, Lock Style.....	2	10	6
5003	Key for Lock Switches	2	10	1

These switches take 1-Button opening plates.

MOMENTARY CONTACT PUSH SWITCHES


No. 1609

1-Circuit, 1 Push Button
1-Inch Porcelain Base

These switches take one-button-opening plates.

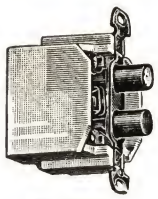
Supplied Lock Style if desired.

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Pkg. Wt.
1609	S. P. Normally Open.....	10	5	3
1606	S. P. Normally Closed.....	10	5	3
1608	Three-Way	10	5	4
1610	D.P. Normally Open	....	10	4
1607	D.P. Normally Closed	....	10	3

Standard Package 10; Carton 2.

H & H WIRING DEVICES

MOMENTARY CONTACT PUSH SWITCHES



No. 2061

Single-Pole, 2-Circuit
2 Push Buttons
With Common Feed

2 3/16-inch porcelain base. No. 2363 has 1½-inch porcelain base.

These switches take standard push plates.

Cat. No.	Description	Amps. 250 V.	Pkg. Wt.
2061	Normally Open	6	7
2061-L	Same, Lock Style	6	7
2110	One Circuit Normally Open other Closed	6	7
2110-L	Same, Lock Style	6	7
2363	Both Circuits Normally Open	2	5
5003	Key for Lock Switches		1

Standard Package 10; Carton 2.

MOMENTARY CONTACT TUMBLER SWITCHES



No. 1631

Single-Pole, 1-Inch Base
Normally Open, Porcelain

Cat. No.		Amperes 125 V.	Amperes 250 V.	Pkg. Wt.
1629		10	5	4
	Normally Closed, Porcelain			
1631		10	5	4

Standard Package 10; Carton 2.

ROTARY LOCK SWITCHES

With P. & F. Corbin Pin Tumbler Switches



No. 1281 with No. 1285 plate

STANDARD LOCK SWITCHES
(Rotary Type)

These switches have been designed for use in theatres, auditoriums, schools, hospitals, or any other buildings where it is necessary to prevent unauthorized tampering. The use of lock switches keeps the lighting control in the proper hands. Depth of switch base, 1½ inches.

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Car-ton	Std. Pkg.	Pkg. Wt.
1281	Single-Pole	10	5	10	30	19
1282	Double-Pole	....	10	2	10	6
1283	Three-Way	10	5	2	10	6
1284	Four-Way	5	2	2	5	3
1285	Single Solid Plate	..	..	10	30	9

OUTDOOR WEATHERPROOF LOCK SWITCHES
(Rotary Type)

For switch control in locations exposed to weather. A rubber mat, cadmium-finish plate and screw cap provide the weather-proofing. Depth of switch base, 1½ inches.



No. 1281-WP

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Car-ton	Std. Pkg.	Pkg. Wt.
1281-WP	Single-Pole	10	5	10	30	28
1282-WP	Double-Pole	....	10	2	10	9
1283-WP	Three-Way	10	5	2	10	9
1284-WP	Four-Way	5	2	2	5	5

Catalog number includes Brass Plate and Cap, Cadmium finished.

H & H WIRING DEVICES

WEATHERPROOF SWITCHES

For Outlet Boxes or Wall Cases



No. 7981

For installations exposed to weather, dampness and special atmospheric conditions as on porches, garages, patios, industrial plants and other exposed locations. Switch is operated with a lever pointing to "On" and "Off" positions.

The catalog number includes a brass plate, cadmium finished and a weatherproof mat.

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Car-ton	Std. Pkg.	Pkg. Wt.
7981	Single-Pole	10T	5	2	10	7
7865	Single-Pole	20T	10	2	10	7
7982	Double-Pole	10T	10	2	10	7
7866	Double-Pole	20T	20	2	10	7
7983	Three-Way	10T	5	2	10	7
7867	Three-Way	20	10	2	10	7
7984	Four-Way	5T	2	2	5	4

Any of the above switches can be supplied in 2 or 3 gangs at twice or three times the price of single switches.

WEATHERPROOF SWITCHES

For "FS" Type Fittings

The catalog number includes a steel, aluminum spray finished plate with a rounded edge, designed for "FS" Type fittings. A rubber weatherproof mat is included which fits under the cover.



No. 7981-FS

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Car-ton	Std. Pkg.	Pkg. Wt.
7981-FS	Single-Pole	10T	5	2	10	7
7865-FS	Single-Pole	20T	10	2	10	7
7982-FS	Double-Pole	10T	10	2	10	7
7866-FS	Double-Pole	20T	20	2	10	7
7983-FS	Three-Way	10T	5	2	10	7
7867-FS	Three-Way	20	10	2	10	7
7984-FS	Four-Way	5T	2	2	5	4

D.P., D.T., 3 POSITIONS, 2 CIRCUIT TUMBLER SWITCH



No. 4361



No. 4362

Provides convenient flush control for two-speed motors, such as attic fans, blowers, etc. Gives any two-circuit connections for permanent and auxiliary lighting, or dark room control of colored and bright lights.

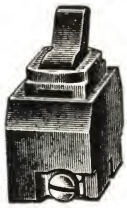
Switch has positive "Off" position in the center. It is impossible to switch from one circuit to the other without stopping at the center, and again moving the switch lever to the second position.

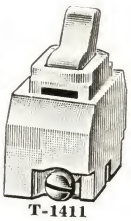
Due to the length of throw necessary for the switch lever, Plate No. 4362 with extra long opening is required.

20 Amp., 125 Volt; 10 Amp., 250 Volt

Cat. No.	Description	Car-ton	Std. Pkg.	Pkg. Wt.
4361	Bakelite, Switch, 1 5/8" depth	2	10	9
4362	Brass Plate, .060"	2	10	8

H & H WIRING DEVICES
INTERCHANGEABLE LINE


T-1311


T-1411

SWITCHES

Three switches or other interchangeable units may be assembled to a yoke and installed in a single gang wall case with a single plate.

Brown Bakelite

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
T-1311	Single-Pole	10T	5	10	100	9
T-1312	Double-Pole	10T	10	2	10	1
T-1313	Three-Way	10T	5	10	50	5
T-1314	Four-Way	5T	2	2	10	1

Ivorylite

T-1411	Single-Pole	10T	5	10	50	5
T-1412	Double-Pole	10T	10	2	10	2½
T-1413	Three-Way	10T	5	10	30	3
T-1414	Four-Way	5T	2	2	10	1

LOCK STYLE

Brown Bakelite


T-1311-L

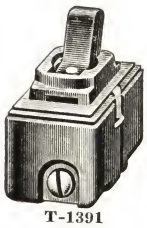
T-1311-L	Single-Pole	10T	5	10	100	9
T-1312-L	Double-Pole	10T	10	2	10	2½
T-1313-L	Three-Way	10T	5	10	50	5
T-1314-L	Four-Way	5T	2	2	10	1
T-1499	Key	--	--	1	1	4 oz.

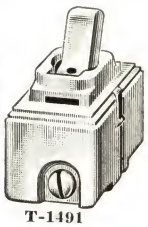
One No. T-1499 Key is furnished with each Lock Switch.

Momentary Contact, Single Pole

T-1311-MO	Norm. Open*	10	5	2	10	2½
T-1311-MC	Norm. Closed*	10	5	2	10	2½
T-1411-MO	Norm. Open†	10	5	2	10	2½
T-1411-MC	Norm. Closed†	10	5	2	10	2½

* Bakelite. † Ivorylite.


T-1391


T-1491

RESIDENTIAL TYPE SWITCHES

T-1391	Single-Pole*	10	5	10	100	9
T-1393	Three-Way*	10	5	10	50	5
T-1491	Single-Pole†	10	5	10	50	5
T-1493	Three-Way†	10	5	10	30	3

* Bakelite. † Ivorylite.

FLUSH NEON PILOT LIGHT

Neon light assures long life of many thousand hours. Light is cold, and lamps give off no heat. Consumes only 1/25 Watt. Unit fits both single opening and combination 2 or 3 opening plates. No. T-1375 has a plastic, unbreakable prism lens.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
T-1375	Brown Bakelite	10	30	3
T-1475	Ivorylite	10	30	3

H & H WIRING DEVICES
INTERCHANGEABLE LINE


T-1320


T-1420

CONVENIENCE OUTLETS

15 Amp. 125 Volts, 10 Amp. 250 Volts.

These units have parallel slots and are supplied in Bakelite or Ivorylite.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
T-1320	Brown Bakelite	10	100	6
T-1420	Ivorylite	10	100	6

CONVENIENCE OUTLETS

With Connecting Lead for Pilot

15 A. 125 V., 10 A. 250V.


T-1341


T-1441

T-1341	Brown Bakelite	10	30	4
T-1441	Ivorylite	10	20	3


T-13202


T-14202

DUPLEX AND TRIPLEX OUTLETS

15A. 125V.
10A. 250V.

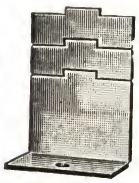

T-13203


T-14203

T-13202	Duplex, Bakelite	10	100	22
T-14202	Duplex, Ivorylite	10	50	11
T-13203	Triplex, Bakelite	10	100	25
T-14203	Triplex, Ivorylite	10	50	13


T-1322


T-1422


T-1346

RADIO OUTLET AND DIVIDER PLATE

T-1322	Radio Outlet, Bakelite	2	10	1
T-1422	Radio Outlet, Ivorylite	2	10	1
T-1346	Divider Plate	5	10	3

CAPS

15 Amp. 125 Volts, 10 Amp. 250 Volts


T-1321


T-1421


T-DR


T-1323


T-1423

T-1321	Standard, Bakelite	10	100	5
T-1421	Standard, Ivorylite	10	50	2
T-DR	Standard, Rubber, 5/16"	25	100	7
T-1326	Polarized, Bakelite	10	100	7
T-1426	Polarized, Ivorylite	10	50	4
T-1323	Radio, Bakelite	2	10	1
T-1423	Radio, Ivorylite	2	10	1

Cord hole, 9/32" (.281).

H & H WIRING DEVICES

INTERCHANGEABLE LINE

NIGHT LIGHTS

With Clear Lamps and Metal Reflectors

75 Watts, 125 Volts



T-1339

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
T-1339	With Chromium Reflector	10	30	3
T-1339-B	With Brush Brass Reflector	10	30	5
T-1339-BR	With Brown Reflector	10	30	5
T-1339-I	With Ivory Enam. Reflect.	10	30	5

S-6, 6-watt, 120-volt clear lamps are supplied.

PILOT LIGHTS

With Red Lamps and Metal Hood

75 Watts, 125 Volts



T-1340

T-1340	With Chromium Hood	10	30	3
T-1340-B	With Brush Brass Hood	10	30	5
T-1340-BR	With Brown Hood	10	30	5
T-1340-I	With Ivory Enamel Hood	10	30	3

T-S6, 6-watt, 120-volt red lamps are supplied.

FLUSH PILOT LIGHTS

With Red Jewel and T-S6 Lamp

For 1 or 2-Opening Plates 75 Watts, 125 Volts

Separate jewels will be supplied on order.



T-1376



T-1377

T-1376	One Opening, Vertical	10	30	7
T-1377	Two Openings	10	30	7
T-1342	Red Jewel for T-1376, T-1377	10	30	1½

REFLECTORS AND HOODS



T-1352



T-1343

T-1352	Chromium Reflector for T-1339	10	30	2
T-1352-B	Brush Brass Reflector for T-1339-B	10	30	2
T-1352-BR	Brown Enameled Reflector for T-1339-BR	10	30	2
T-1352-I	Ivory Enameled Reflector for T-1339-I	10	30	2
T-1343	Chromium Hood for T-1340	10	30	2
T-1343-B	Brush Brass Hood for T-1340-B	10	30	2
T-1343-BR	Brown Enameled Hood for T-1340-BR	10	30	2
T-1343-I	Ivory Enameled Hood for T-1340-I	10	30	2



T-S6

LAMPS

6 Watts, 120 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
T-S6	Clear Lamp only	10	120	5
T-S6	Red Lamp only	10	120	5

H & H WIRING DEVICES

INTERCHANGEABLE LINE

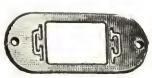
MOUNTING STRAPS



T-1347



T-1348



T-1354

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
T-1347	Single Opening	10	50	3
T-1348	Three-Opening	10	50	5
T-1354	Appliance Strap	10	100	2



T-1363

OUTLET BOX COVERS

With Mounting Straps for One or Two Units

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
T-1361	One Opening, for 3¼" Box	10	100	21
T-1362	One Opening, for 4" Box	10	100	28
T-1363	Two Openings, for 4" Box	10	50	14

BELL PUSH

6-12 Volts



T-1344



T-1444

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
T-1344	Bakelite	10	20	4 oz.
T-1444	Ivorylite	5	10	4 oz.



T-1345



T-1445

BLANK INSERT

With Cord Hole Knockout

May be used to fill unused openings in plates. Knockout can be punched through for use as cord hole or telephone outlet.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
T-1345	Bakelite	5	10	2 oz.
T-1445	Ivorylite	5	10	1 oz.

OUR FACILITIES ARE MAINTAINED FOR YOU— DO NOT HESITATE TO USE THEM.

H & H WIRING DEVICES
INTERCHANGEABLE LINE
BAKELITE PLATES
UNILINE (Trade Mark)


No. 91041


No. 91011


No. 91021

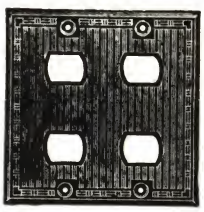

No. 91031

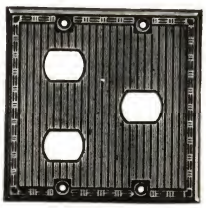
Single Gang

Cat. No.	Description	Carton-	Std. Pkg.	Pkg. Wt.
91041	One Opening, Vertical	10	100	13
91011	One Opening, Horizontal	10	100	12
91021	Two Openings	10	50	8
91031	Three Openings	10	30	4


No. 91042


No. 91012


No. 91022


No. 91052

Two Gangs

91042	Two Openings, Vertical	10	50	14
91012	Two Openings, Horizontal	10	50	13
91022	Four Openings	10	30	9
91032	Six Openings	10	20	6
91052	Two Openings and One Opening	30	10	6


No. 91023

Three Gangs

91023	Six Openings	10	20	7

Mounting Straps: The correct mounting straps are supplied with each plate.

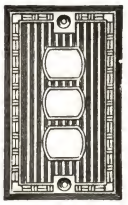
Plate Screws: Brown plated screws are standard and are supplied with Bakelite plates.

H & H WIRING DEVICES
INTERCHANGEABLE LINE
IVORYLITE PLATES
UNILINE (Trade Mark)


No. 92041

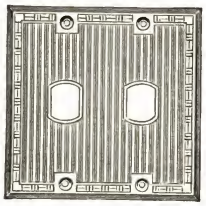

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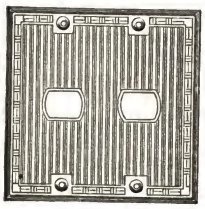

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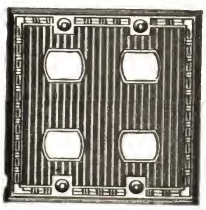

No.92031

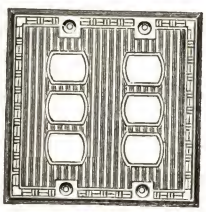
Single Gang

Cat. No.	Description	Carton-	Std. Pkg.	Pkg. Wt.
92041	One Opening, Vertical	10	100	14
92011	One Opening, Horizontal	10	100	16
92021	Two Openings	10	50	7
92031	Three Openings	10	30	6


No. 92042

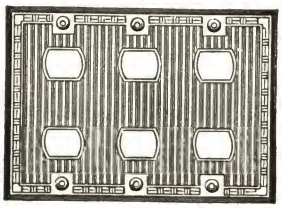

No. 92012


No.92022


No. 92032

Two Gangs

92042	Two Openings, Vertical	10	30	10
92012	Two Openings, Horizontal	10	30	10
92022	Four Openings	10	30	9
92032	Six Openings	10	20	5
92052	Two Openings and One Opening	30	10	6


No. 92023

Three Gangs

92023	Six Openings	10	20	6

Mounting Straps: The correct mounting straps are supplied with each plate.

Plate Screws: Ivory enameled metal screws are standard and are supplied with Ivorylite plates.

H & H WIRING DEVICES

SURFACE TUMBLER SWITCHES


No. 610-BC

PONY TYPE

With Bakelite Covers

6 Amperes, 125 Volts
3 Amperes, 250 Volts

Base diameter: Single-Pole, 2 inches: Three-Way, 2⅛ inches. Screw hole spacing, 1 7/16 inches.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
611-BC	Single-Pole, Slotted	10	100	22
610-BC	Single-Pole, Closed	10	100	22
613-BC	Three-Way, Slotted	10	100	24
612-BC	Three-Way, Closed	10	100	24

10 AMPERE TUMBLER SWITCHES

With Bakelite Covers
Single-Pole, 3-Way, 4-Way

10 Amperes, 125 Volts
5 Amperes, 250 Volts
Double Pole, 10 Amperes, 250 Volts

Base diameter, 2 15/32 inches.
Screw hole spacing 1¾ inches.


No. 8473-BC

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
8472-BC	Single-Pole, Slotted	10	100	38
8471-BC	Single-Pole, Closed	10	100	41
8476-BC	Three-Way, Slotted	10	50	20
8475-BC	Three-Way, Closed	10	50	22
8474-BC	Double-Pole, Slotted	10	100	41
8473-BC	Double-Pole, Closed	10	100	41
8478-BC	Four-Way, Slotted	2	10	4
8477-BC	Four-Way, Closed	2	10	5

20 AMPERE TUMBLER SWITCHES


No. 8485-BC

With Bakelite Covers

Rating: 20 Amps., 250 Volts

Base diameter, 2 15/32 inches.
Screw hole spacing, 1¾ inches.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
6089-BC	*Single-Pole, Slotted	10	30	13
6090-BC	*Single-Pole, Closed	10	30	13
8490-BC	Double-Pole, Slotted	10	30	13
8485-BC	Double-Pole, Closed	10	30	13

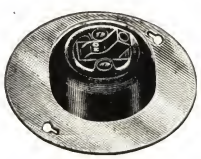
* Quadruple Break.

SURFACE TUMBLER SWITCHES FOR OUTLET BOXES

PONY TYPE

With Bakelite Switch Covers

Ratings: Single-pole, 6 amperes, 125 volts; 3 amperes, 250 volts. Three-way, 5 amperes, 125 volts; 2 amperes, 250 volts.


No. 6065-BC

Cat. No.	Description	Cover Inches	Carton	Std. Pkg.	Pkg. Wt.
6064-BC	Single-Pole	3¼	5	50	23
6065-BC	Single-Pole	4	5	50	29
6068-BC	Three-Way	3¼	5	50	23
6069-BC	Three-Way	4	5	50	30

H & H WIRING DEVICES

SURFACE TUMBLER SWITCHES FOR OUTLET BOXES


No. 4464

FOR INSULATED SYSTEMS

With Bakelite Outlet Box Covers and "T" Rating

10 Amperes, 125 Volts
5 Amperes, 250 Volts

Cat. No.	Description	Cover Inches	Carton	Std. Pkg.	Pkg. Wt.
4464	Single-Pole	3¼	10	50	23
4465	Single-Pole	4	10	50	24
4466	Three-Way	3¼	10	50	31
4467	Three-Way	4	10	50	32

FOR INSULATED SYSTEMS

With Bakelite Outlet Box Covers

10 Amperes, 125 Volts
5 Amperes, 250 Volts


No. 4405

Cat. No.	Description	Cover Inches	Carton	Std. Pkg.	Pkg. Wt.
4405	Single-Pole	3¼	10	50	10
4406	Single-Pole	4	10	50	15
4407	Three-Way	3¼	10	50	10
4408	Three-Way	4	10	50	15


No. 4411

FOR OUTLET BOXES
10 AMPERE

With Outlet Box Covers
Cadmium Finish

10 Amperes, 125 Volts
5 Amperes, 250 Volts

Cat. No.	Description	Cover Inches	Carton	Std. Pkg.	Pkg. Wt.
4411	Single-Pole	3¼	10	50	17
4412	Single-Pole	4	10	50	24
4413	Three-Way	3¼	10	50	19
4414	Three-Way	4	10	50	26

WITH BAKELITE SWITCH COVERS AND OUTLET BOX COVERS*

10 AMPERE

Single-Pole, Three-Way, Four-Way
10 Amp., 125 V.; 5 Amp. 125 V.
Double-Pole, 10 Amp., 250 V.


No. 6085-BC

Cat. No.	Description	Cover Inches	Carton	Std. Pkg.	Pkg. Wt.
6081-BC	Single-Pole	3¼	10	50	25
6085-BC	Single-Pole	4	10	50	31
6083-BC	Three-Way	3¼	10	50	27
6087-BC	Three-Way	4	10	50	30
6082-BC	Double-Pole	3¼	10	50	26
6086-BC	Double-Pole	4	10	50	32
6084-BC	Four-Way	3¼	2	10	8
6088-BC	Four-Way	4	2	10	7

* Corrosion resisting finish.
Dia. 3 7/16 and 4 1/16 inches, screw hole spacings 2¾ inches and 3½ inches.

H & H WIRING DEVICES



No. 293

OIL BURNER CONTROL SWITCH

With Red Enamel Outlet Box Cover

10 Amperes, 125 Volts
5 Amperes, 250 Volts

Cat. No.	Description	Cover Inches	Carton	Std. Pkg.	Pkg. Wt.
293	Single-Pole	3¼	10	50	23
291	Single-Pole	4	10	50	25

Has clear indications "Oil Burner Control Switch." Corrosion resisting finish.

CEILING PULL SWITCHES

With Bakelite Covers

Base Diameter 2½ Inches
Screw Hole Spacing 1 21/32 Inches


No. 3741-BC

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
3742-BC	Single-Pole*	10	5	10	30	16
3741-BC	Single-Pole†	10	5	10	30	18
3744-BC	Double-Pole*	....	10	2	10	7
3743-BC	Double-Pole†	....	10	2	10	7
3746-BC	Three-Way*	10	5	2	10	7
3745-BC	Three-Way†	10	5	2	10	7
4060-BC	Four-Way†	10	5	2	10	7
3747-BC	Two-Circuit†	10	5	2	10	7
3749-BC	Three-Circuit†	10	5	2	10	7

* Slotted. † Closed.


No. 3742-BCS

WALL PULL SWITCHES

With Bakelite Covers

Base Diameter 2½ Inches
Screw Hole Spacing 1 21/32 Inches

Cat. No.	Base	Amperes 600V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
3742-BCS	Single-Pole*	10	5	10	30	18
3744-BCS	Double-Pole*	....	10	2	10	7

* Slotted.

Six-foot heavy black cord is standard.

BAKELITE CANOPY PULL SWITCHES

6 Amp., 125 Volts; 3 Amp., 250 Volts

Current carrying parts are enclosed in a bakelite compartment, separated and insulated from all other metal parts.


No. 7745

Short Chain, 6-Foot Cord

Cat. No.	Stem Inches	Carton	Std. Pkg.	Pkg. Wt.
7745	¼	10	100	13
7746	⅜	10	100	13
7716	⅝	10	100	13

H & H WIRING DEVICES


No. 5020-BC

CEILING PULL SWITCHES

With Outlet Box Covers and Bakelite Switch Covers

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
5020-BC	S. P., 3¼-inch	10	5	10	30	19
5026-BC	S. P., 4-inch	10	5	10	30	23

BACK WIRED CEILING PULL SWITCHES

With Outlet Box Covers and Bakelite Switch Covers

10 A., 125 V.; 5 A., 250 V.

Easy to wire, no switch covers to remove. Connect wires to contacts on back of base and fasten to box.


No. 5020-BCW

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
5020-BCW	S. P., 3¼-inch	10	5	10	30	19
5026-BCW	S. P., 4-inch	10	5	10	30	23

Six-foot heavy black cord is standard.

TYPE C CEILING PULL SWITCHES

With Bakelite Covers, Closed Base

20T Amp. 125 Volts
10 Amp. 250 Volts


No. 3731

Switches can be supplied in Wall Pull type with a side cord outlet—if desired, add "S" to the catalog number. Base diameter is 2 13/16 inches, screw hole spacing, 1 21/32 inches—1¾ inches on centers.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
3731	Single-Pole	2	10	9
3732	Double-Pole	2	10	9
3733	Three-Way	2	10	9
3734	D.P., D.T., 2 "Off" Position	2	10	9

SLIDE LEVER TYPE

Single Pole — Bakelite
5/16-inch Cord

10 Amps, 125 Volts; 3 Amps. 250 Volts.


No. 531

Cat. No.	Color	Carton	Std. Pkg.	Pkg. Wt.
531	Black	10	50	5
531-I	Ivorylite	10	50	5


No. 541

BLACK BAKELITE

Three-Heat

3 Amps. 125 Volts; 1 Amp. 250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
541	5/16-inch	10	50	6

BLACK BAKELITE—DOUBLE-POLE

10 Amp. 250 Volt


No. 6837

Cat. No.	Cord Hole	Carton	Std. Pkg.	Pkg. Wt.
6837	13/32-inch (.406)	10	50	8

H & H WIRING DEVICES

SHALLOW CANOPY PULL SWITCH

3 Amp. 125 V., 1 Amp. 250 V.



No. 450

Stem diameter $\frac{13}{32}$ in.; depth, $\frac{9}{16}$ in.; width, $\frac{11}{16}$ in. Switch has 2½-inch chain and 4 ft. black cord with tassel. Six-inch leads are standard. Brass is standard finish. Wash nickel optional at no extra cost.

Mechanism is enclosed in a brass shell and wire leads are secured in the Bakelite section. Pull chain has a special stop feature to prevent breakage.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
450	Single-Pole	25	100	8

ROTARY CANOPY SWITCHES

With Removable Metal Handles

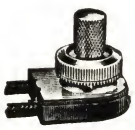
3 Amp. 125 Volts, 1 Amp. 250 Volts



No. 7775

Cat. No.	Stem Inches	Carton	Std. Pkg.	Pkg. Wt.
7775	$\frac{3}{16}$	25	100	3
7776	$\frac{5}{16}$	25	100	3
7777	$\frac{7}{16}$	25	100	3

Have 6 inches of No. 18 stranded fixture wire. Wires up to and including 8 inches supplied without extra charge. Switches with longer wires supplied on special order at the usual advance in price. Standard finish on exposed metal is brass, but wash nickel, bronze or black will be supplied without extra charge when specified.



No. 7783

ROTARY CANOPY SWITCHES

With Fixed Metal Handles

3 Amp. 125 Volts, 1 Amp. 250 Volts

Cat. No.	Stem Inches	Carton	Std. Pkg.	Pkg. Wt.
7783	$\frac{3}{16}$	25	100	4
7784	$\frac{5}{16}$	25	100	4
7785	$\frac{7}{16}$	25	100	4

See footnotes above.

PENDENT SWITCHES

Brass Shell

6 Amp. 125 Volts; 3 Amp. 250 Volts

Pendent cap and $\frac{13}{32}$-inch composition bushed cord hole.



No. 3672

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
3672	Side Buttons	10	100	14

FEED THROUGH CORD SWITCHES



No. 530

PONY SIZE

Brown Bakelite or Ivorylite

Single Pole

3 Amps. 125 Volts; 1 Amp. 250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
530	$\frac{9}{32}$" (.281) Bakelite	10	50	3
530-I	$\frac{9}{32}$" (.281) Ivorylite	10	50	3

H & H WIRING DEVICES



No. 1913

DUPLEX BAKELITE

Side Wired "T" Slots
4 Screws, Plaster Ears

15 Amps., 125 Volts
10 Amps., 250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
1913	Bakelite	10	100	21
1913-I	Ivorylite	10	50	16

CONVENIENCE OUTLETS
DUPLEX

With Parallel Slots and Plaster Ears

Single Sided Contacts

15 Amps., 125 Volts
10 Amps., 250 Volts



No. 314



No. 314-I

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
314	Brown Bakelite	10	100	14
314-I	Ivorylite	10	50	14

CONVENIENCE OUTLETS

15 Amp., 125 Volts; 10 Amp., 250 Volts



No. 1911



No. 7700

SINGLE, BAKELITE

No. 1911 has T-slots and takes all standard and parallel blade caps. One parallel slot is elongated to fit polarized parallel caps.

Side Wired with Plaster Ears

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
1911	Brown, T-slots	10	100	14
1911-I	Ivorylite, T-slots	10	50	6

For Tumbler Plates

7700	Brown	10	100	12
7700-I	Ivorylite	10	50	5

SINGLE AND DUPLEX FLUSH CONVENIENCE OUTLETS

Parallel Slots



No. 311



No. 312



No. 312-I

15 Amps., 125 Volts; 10 Amps., 250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
311	Single, Brown	10	100	12
311-I	Single, Ivorylite	10	100	12
312	Duplex, Brown	10	100	16
312-I	Duplex, Ivorylite	10	100	16

H & H WIRING DEVICES

2-CIRCUIT, DUPLEX, 2 FEED WIRES

15 Amp., 125 Volts; 10 Amp., 250 Volts


1914-1915

With Plaster Ears, Side-Wire Terminals — T Slots

One circuit or opening is usually left "Always On" for various appliances. The other circuit may be used for floor or table lamps controlled by a switch. This removes the nuisance of going around to each lamp to light or turn out, as all lamps may be controlled at the switch.

Brown

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
1914	One Return, common negative	10	100	19
1915	Two Returns, separate negative	10	100	19

Ivorylite

1914-I	One Return, common negative	10	50	11
1915-I	Two Returns, separate negative	10	50	10

CONVENIENCE OUTLETS

TOP WIRED — BAKELITE

T Slots with Plaster Ears

15 Amp., 125 Volts
10 Amp., 250 Volts


No. 7725


No. 7725-B

Brown Bakelite

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7725	Duplex	10	100	21
7725-B	Duplex, 4 Screws	10	100	21

Ivorylite

7725-I	Duplex	10	50	12
7725-BI	Duplex, 4 Screws	10	50	12


No. 9200

TWIST-TITE DUPLEX CONVENIENCE OUTLETS

15 Amp, 125 Volts
10 Amp., 250 Volts

Takes standard parallel caps. After inserting caps, a slight twist holds caps from pulling out.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
9200	Brown Bakelite	10	100	23
9200-I	Ivorylite	10	50	13
9205	With 3¼" Box Cover	10	50	20
9206	With 4" Box Cover	5	50	23

H & H WIRING DEVICES

CONVENIENCE OUTLETS


No. 1918


No. 1918-I

2-WIRE DUPLEX POLARIZED BAKELITE RECEPTACLES

15 A. 125 V., 10 A. 250 V.

Two-circuit receptacles are made with one return which has a common negative connection, and two returns with separate negative connections.

Catalog No. Brown	Catalog No. Ivorylite	Description	Carton	Std. Pkg.	Pkg. Wt.
1918	**1918-I**	Single Circuit	10	30	6
1919	**1919-I**	2 Circuits, 1 Return	10	30	7
1920	**1920-I**	2 Circuits, 2 Returns	10	30	7

DUPLEX OUTLETS

For 3¼ and 4-Inch Boxes with Bakelite Box Covers for Insulated Systems

15 A. 125 V., 10 A. 250 V.


No. 4409

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
4409	Parallel Slots, 3¼" Cover	10	50	10
4410	Parallel Slots, 4" Cover	10	50	10
4418	T Slots, 3¾" Cover	10	50	12
4419	T Slots, 4" Cover	10	50	15

SINGLE AND DUPLEX OUTLETS

For 3¼- and 4-Inch Boxes

Cover with corrosion resisting finish T Slot Bakelite Receptacles

15 Amp. 125 Volts, 10 Amp. 250 Volts


No. 7007


No. 7008

Cat. No.	Description	Size Inches	Carton	Std. Pkg.	Pkg. Wt.
7006	Single	3¼	10	50	15
7007	Single	4	5	50	20
7049	Duplex	3¼	10	50	16
7008	Duplex	4	5	50	20

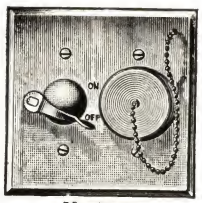
WEATHERPROOF MALE FLUSH RECEPTACLE

Especially suitable for auto trailers, where connections may be made in parking areas. Weatherproof with rubber mat under plate. Cap screws over opening when not in use. Brass plate included.


No. 7458

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7458	With Plate, 2-Wire	2	10	5

H & H WIRING DEVICES



No. 7886

WEATHERPROOF FLUSH SWITCH and RECEPTACLE

Two-Gang Unit

Unit is complete with switch, receptacle, cadmium finished brass plate and weatherproof mat.

Cat. No.	Description	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
7886	Single-Pole	10T	5	2	10	11
7888	Three-Way	10T	5	2	10	11

WEATHERPROOF FLUSH RECEPTACLE

15 Amps., 125 Volts
10 Amps., 250 Volts

Complete, with cap to close opening, plate, rubber mat and receptacle. Competitively priced.


No. 454

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
454	Complete Unit	10	30	8

FAN HANGER OUTLET

15 Amp. 125 V., 10 Amp. 250 V.


No. 7750

Provides electrical connection and mechanical support for fans. Easy to install and fits standard 4-inch square box. Supports a weight many times greater than a fan. Two standard types are supplied as listed. Brush Brass .060" plate is standard on both types.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7750	Clamp type, with plate	10	20	13
7751	Stud type, with plate	10	20	13
7752	Clamp type, no plate	10	20	8
7753	Stud type, no plate	10	20	8
7755	Plate for Nos. 7752, 7753	10	20	5

THREE-WIRE RECEPTACLE AND WARNING LIGHT

15 Amp., 125 Volts
10 Amp., 250 Volts

Candelabra base lamp No. 5823 is included. For Nos. 7855 and 7856 receptacles.


No. 7855

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7855	With .060 Brass Plate	2	10	8
7856	Without Plate	2	10	4
7857	.060" Brass Plate	2	10	3
5823	Candelabra Lamp	2	10	1

H & H WIRING DEVICES

CLOCK HANGER OUTLET

15 Amp., 125 V.; 10 Amp., 250 V.


No. 7707

A double service device providing mechanical support for the clock and electrical connection. Receptacle is recessed so the plug cap goes flush with the plate. This allows the clock to hang flat over the outlet, entirely covering it, with all wiring concealed. May be installed in a mantel for shelf clocks. Standard plate finish is brush brass.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7707	Two-Wire, with .040" Plate	2	10	4
7707-C	Two-Wire, with .060" Plate	2	10	4
7708	Three-Wire, with .040" Plate*	2	10	6
7708-C	Three-Wire, with .060" Plate	2	10	6

* Fits SY and SN caps.

CLOCK HANGER OUTLET

15 Amp., 125 V.; 10 Amp., 250 V.

Provides mechanical support and electrical connection for clocks.


No. 453

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
453	With .040" Plate	10	30	15

FLOOR OUTLET

15 Amp., 125 V.; 10 Amp., 250 V.


No. 7797

To plug in lamps or appliances without the nuisance of running long cords from the wall. Made in two styles: (1) bevel edge plate .060" brass and (2) square edge solid brass plate where it is desired to make an absolutely flush job. Two threaded solid brass covers are supplied, one for completely closing the outlet when not in use; the other with cord hole and bushing to shield the plug cap when connected. Receptacle is recessed so the plug is sunk flush with the floor. Not waterproof, designed for hardwood floors or dry places.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7797	With bevel edge plate	2	10	12
7798	With square edge plate	2	10	7

WEATHERPROOF FLUSH RECEPTACLE AND CAP

15 Amp., 125 V.; 10 Amp., 250 V.


No. 7793


No. 7792

A permanent, weatherproof outlet for plugging in outdoor lighting connections or appliances; also for inside installations exposed to moisture.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7792	With Plate, 2-Wire	2	10	5
7780	2-Gang, with Plate, 2-Wire	2	5	7
7796	With Plate, 3-Wire*	2	10	7
7793	Metal Cap	2	10	1

* Pony size Cap must be used.

H & H WIRING DEVICES

WEATHERPROOF FLUSH RECEPTACLE

15 Amp., 125 V.
10 Amp., 250 V.


No. 7792-FS

For "F S" Type Fittings. Unit is complete with receptacle, weatherproof mat and steel plate, cadmium finished. Plate edges are rounded, to fit "FS" type fittings.

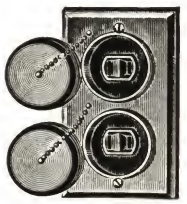
Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7792-FS	Two-Wire	2	10	7
7796-FS	Three-Wire*	2	10	7

* Pony size Cap must be used.

WEATHERPROOF DUPLEX FLUSH RECEPTACLE

15 Amp., 125 V.; 10 Amp., 250 V.

Complete with .060-inch brass plate, metal caps, rubber mat and duplex outlet.


No. 7890

Cat. No.	Carton	Std. Pkg.	Pkg. Wt.
7890	2	10	7


No. 7092

THREE- AND TWO-WIRE COMBINATION RECEPTACLES

15 Amp., 125 V.; 10 Amp., 250 V.

Each Outlet Independently Wired

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7092	Duplex	10	30	12
7093	With 4" Cover	5	30	21

One Feed, One Return
Three-Wire Outlet Grounded to Yoke

7094	Duplex	10	30	12
7095	With 4" Cover	5	30	21

One Feed, One Return
Three-Wire Outlet Grounded to Binding Screw

7096	Duplex	10	30	12
7097	With 4" Cover	5	30	21

WARNING LIGHT AND RECEPTACLE

The telltale light gives a warning of current left on in toasters, percolators, flat irons and other appliances. Removes the hazard of damage to appliances or more serious results.


No. 7728


No. 7711

15 Amp., 125 Volts; 10 Amp., 250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7728	With Bakelite Plate	2	10	7
7711	With .060-Inch Brass Plate	2	10	8
7712	Without Plate	2	10	4
7729	Bakelite Plate	2	10	2
4179	.060-Inch Brass Plate	2	10	3

Standard package, 10; carton, 2.

H & H WIRING DEVICES

ONE-GANG BRASS PLATES

For Warning Light Receptacles


No. 8691

Round, red glass jewels are standard. Other colors can be supplied on special orders.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
8691	.040-Inch	10	30	6
3000	.100-Inch	10	30	11

LOUVRE PLATE

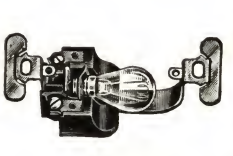
For use with warning light receptacles for deflected lighting in stairways, theatres, hospitals, etc.

Single-Gang


No. 6408

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
6408	.040-Inch	5	30	6

WARNING LIGHT RECEPTACLES AND LAMPS


No. 2999


No. 2971

Receptacles will be supplied with 250 volt lamps on special order.

Cat. No.	Description	Pkg. Wt.
2999	Candelabra Receptacle, 125V Lamp	18
2971	Candelabra Lamp, 125V.	¾

Standard package, 30; carton, 10.

LOUVRE LIGHTING UNIT

Two-Gang

For theatres, hospitals, sickrooms, nurseries and soft, diffused lighting.

Unit has 3-watt, 125-volt candelabra lamp, brush brass or white enamel finish on plate.


No. 5366

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
5366	With Brush Brass Plate	2	10	13
5366-W	With White Enamel Plate	2	10	13

GLASS JEWELS FOR WARNING LIGHTS


No. 8619


No. 1513

These jewels fit standard single receptacles and tumbler switch plates. Standard color is red, but other colors will be supplied on special order.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
8619	For Single Recep. Plates	10	30	2
1513	For Tumbler Switch Plates	10	30	1

H & H WIRING DEVICES

BAKELITE PLATES — UNILINE DESIGN

For Standard Wiring Devices

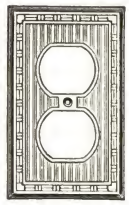

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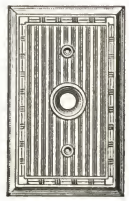

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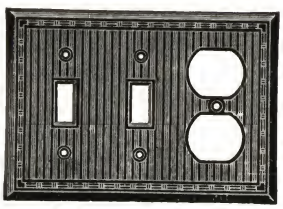

No. 92121


No. 92181

Brown Bakelite					Ivorylite			
Cat. No.	Carton	Std. Pkg.	Pkg. Wt.	Description	Cat. No.	Carton	Std. Pkg.	Pkg. Wt.
91071	10	100	8	One Gang, Tumbler	**92071**	10	50	4
91072	10 G	100 G	10	Two Gangs, Tumbler	**92072**	10 G	50 G	3
91073	10 G	100 G	8	Three Gangs, Tumbler	**92073**	10 G	50 G	4
91074	10 G	100 G	6	Four Gangs, Tumbler	**92074**	10 G	50 G	4
91075	10 G	100 G	7	Five Gangs, Tumbler	**92075**	10 G	50 G	4
91076	10 G	100 G	6	Six Gangs, Tumbler	**92076**	10 G	50 G	4
91091	10	100	10	One Gang, Single Convenience Outlet	**92091**	10	50	5
91101	10	100	13	One Gang, Duplex Convenience Outlet	**92101**	10	50	6
91102	10 G	100 G	14	Two Gangs, Duplex Convenience Outlet	**92102**	10 G	50 G	4
91081	10	100	10	One Gang, Push	**92081**	10	50	5
91121	10	50	5	One Gang, Blank	**92121**	10	30	4
91122	10 G	50 G	5	Two Gangs, Blank	**92122**	10 G	30 G	2
91181	10	50	5	One Gang, Telephone, 1 Outlet, $\frac{13}{32}$" hole	**92181**	10	30	4

Combinations


No. 91532


No. 91543

Brown Bakelite					Ivorylite			
Cat. No.	Carton	Std. Pkg.	Pkg. Wt.	Description	Cat. No.	Carton	Std. Pkg.	Pkg. Wt.
91512	2	10	2	Two Gangs, Tumbler and Single	**92512**	2	10	2
91532	2	10	2	Two Gangs, Tumbler and Duplex	**92532**	2	10	1½
91572	2	10	2	Two Gangs, Single and Duplex	**92572**	2	10	1½
91523	2	10	2½	Three Gangs, Two Tumbler and Single	**92523**	2	10	2½
91543	2	10	2½	Three Gangs, Two Tumbler and Duplex	**92543**	2	10	2½
91554	2	10	3	Four Gangs, Three Tumbler and Duplex	**92554**	2	10	3

Plate Screws: Brown plated metal screws are standard and are supplied with Bakelite plates.

Plate Screws: Ivory enameled metal screws are standard and are supplied with Ivorylite plates.

H & H WIRING DEVICES

LOCKING CAP, BASE AND RING


No. 7736


No. 7766


RH, RI, RT

No. 7736 is a separable ring which may be attached to any Single Convenience Outlet Plate or any 3¼- or 4-inch Outlet Box Cover for Single Receptacles. It converts a regular outlet into a locking device. The Caps illustrated above and Base No. 7766 lock together in a similar manner.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7736	Locking Ring	10	100	8
7766	"T" Slot Bakelite Base	10	100	12

Caps are listed on a following page.

ATTACHMENT PLUG CAPS
15 Amp., 125 Volts; 10 Amp., 250 Volts


GA


GR

Pony Size, Parallel Blades

Cat. No.	Cord Hole Inches	Description	Carton	Std. Pkg.	Pkg. Wt.
GA	9/32 x 3/8	Bakelite	50	500	20
GD	13/32	Bakelite	50	500	20
GR	5/16	Bakelite	25	100	5

ATTACHMENT PLUG CAPS
15 Amp., 125 Volts; 10 Amp., 250 Volts


No. 4236

PONY SIZE
Composition
Parallel Blades
Fit Duplex Receptacles

Cat. No.	Cord Hole Inches	Carton	Std. Pkg.	Pkg. Wt.
4236	5/16	10	50	7
4237	13/32	10	50	6

COMPOSITION STANDARD CAPS
Parallel Blades


No. 1407

Cat. No.	Cord Hole Inches	Description	Carton	Std. Pkg.	Pkg. Wt.
1407	13/32	Finger Grip	10	250	25
4234*	½	Finger Grip	10	250	25

* Countersunk to seat 5/8-inch cord.


No. 7845


No. 7843

STANDARD SIZE
RUBBER
WITH
CORD GRIP

Cat. No.	Cord Hole Inches	Description	Carton	Std. Pkg.	Pkg. Wt.
7845	19/64–9/16	Parallel	10	50	6
4432	19/64–9/16	Polarized	10	50	7
4433	13/32–5/8	Parallel	10	50	6
4434	13/32–5/8	Polarized	10	50	6
7843	19/64–9/16	Tandem	10	50	7
7844	13/32–5/8	Tandem	10	50	7
GL	13/32	Armored	10	50	6

H & H WIRING DEVICES

RUBBER CAPS WITH PARALLEL BLADES


GS


GG


GSC


GNL


TDR

Cat. No.	Cord Hole Inches	Description	Carton	Std. Pkg.	Pkg. Wt.
GS	3/8	Pony	25	100	6
GSA	9/32	Pony, Plain	25	100	6
GG	13/32	Standard	25	100	8
GGL	13/32	Standard	25	100	8
GSC	3/8	Pony, Cord Grip	25	100	9
GN	5/16	Standard	25	100	8
GNL	11/32	Standard	25	100	8
TDR	5/16	Rectangular	25	100	7

ATTACHMENT PLUG BASES


No. 1901

Bakelite, Pony

Cat. No.	Carton	Std. Pkg.	Pkg. Wt.
1901	50	500	18

Composition, Standard

1403	10	250	20

DOUBLE T SLOT ATTACHMENT PLUG BASE

Bakelite
660 Watts, 250 Volts


No. 7051

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7051	Attachment Plug Base	10	100	19

COMPOSITION CORD CONNECTOR BODIES


No. 7054


No. 3033

Pony Type Parallel Slots

Cat. No.	Cord Hole Inches	Description	Carton	Std. Pkg.	Pkg. Wt.
7054	5/16	For GA, GB Caps	10	50	5
7057	13/32	For GD Cap	10	50	5
3033	5/16	Armored C.G.	10	50	8

Standard Double T Slots

No. 7978 is Countersunk to seat 5/8-inch cord.


No. 7062


No. 3034


No. 7977

Cat. No.	Cord Hole Inches	Description	Carton	Std. Pkg.	Pkg. Wt.
7062	13/32	For RA or TA	10	50	8
4425	5/16	Composition	10	50	8
3034	¼–½	Armored C.G.	10	50	11
***3035**	3/8–5/8	Armored C.G.	10	50	11
***7978**	3/8–5/8	Armored Locking	10	50	12
7977	¼–½	Armored Locking	10	50	12

*Countersunk to seat 5/8-inch cord.

H & H WIRING DEVICES

MOTOR PLUG CAPS, COMPOSITION

15 Amp., 125 Volts; 10 Amp., 250 Volts


No. 7055


No. 7302


No. 4239

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7055	Pony	10	50	3
7302	Pony, with Plate	10	50	6
4239	Standard	10	50	5

ADAPTER CAPS

Composition

Standard to Edison

660 Watts, 250 Volts


No. 7370


No. 7368

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7370	Parallel Blades	10	50	8
7368	Tandem Blades	10	50	8

ARMORED CORD GRIPS

Parallel Blades


No. 7071


No. 4238


No. 7101


No. 7842


No. 4437


GL

Cat. No.	Cord Hole Inches	Description	Carton	Std. Pkg.	Pkg. Wt.
7071	13/32	For Heater Cord	10	50	7
7072	13/32	Standard	10	50	7
7073	1/2	Standard	10	50	7
4238	13/32	Standard	10	50	7
7101	11/32	For "S" Cord	25	250	22
7842	5/16–9/16	Steel Covered	10	50	7
4435	5/16–9/16	Same, Polarized	10	50	7
4437	13/32–5/8	Steel Covered	10	50	7
4438	13/32–5/8	Same, Polarized	10	50	7
GL	13/32	Rubber	10	50	6

CAPS FOR DOUBLE T SLOT RECEPTACLE


No. 4220


No. 4223

Two-Wire Polarized
Composition

15 Ampere, 125 Volts
10 Ampere, 250 Volts

Cat. No.	Description	Pkg. Wt.
4220	13/32-inch Cord Hole	5
4223	13/32-inch Armored Cord Grip	7

Standard package, 50; carton, 10.

H & H WIRING DEVICES

STANDARD CAPS — TANDEM BLADES

Bakelite, Composition, Rubber

15 Amp, 125 Volts; 10 Amp., 250 Volts


No. 7050


No. 7074


No. 4232


No. 7841


No. 7843

Bakelite Caps

Cat. No.	Cord Hole Inches	Description	Carton	Std. Pkg.	Pkg. Wt.
7050	13/32	Bakelite	10	100	10
7074	13/32	Cord Grip	10	50	7
7075	1/2	Cord Grip	10	50	7

Composition Caps

4232	13/32	Steel Covered, C.G.	10	50	8
7841	9/16	Steel Covered, C.G.	10	50	7
4436	13/32–5/8	Steel Covered, C.G.	10	50	7

Rubber Caps

7843	9/16	Cord Grip	10	50	7
7844	5/8	Cord Grip	10	50	7


No. 4227

DOUBLE PLUG CAPS POLARIZED

15 Amp., 125 Volts; 10 Amp., 250 Volts

Suitable for industrial use owing to the greater strength of the prongs which are secured to the cap by two eyelets.

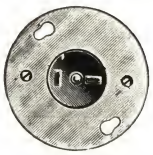
Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
4227	Armored Cord Grip*	10	100	14

*13/32 inch Cord Hole.

POLARIZED DEVICES — 2-WIRE, 10 AMPERES

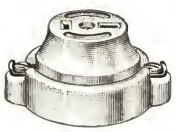
10 Amp., 250 Volts; 15 Amp., 125 Volts


No. 7960


No. 7964


No. 7963


No. 7846


No. 7961


No. 7962

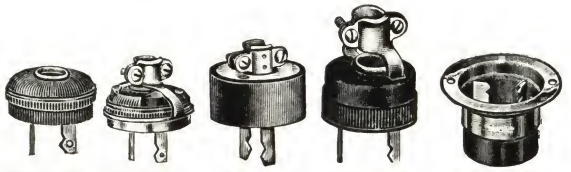
Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7960	Flush Receptacle	10	30	5
7964	Box Receptacle 3¼-inch	10	30	10
7965	Box Receptacle 4-inch	5	30	12
7963	Composition Cap	10	30	4
7846	Rubber, Cord Grip	10	30	5
4427	Rubber, Cord Grip	10	30	5
7966	Armored Cord Grip Cap	10	30	6
7961	Cleat Base	10	30	11
7962	Concealed Base	10	30	10

H & H WIRING DEVICES

POLARIZED DEVICES

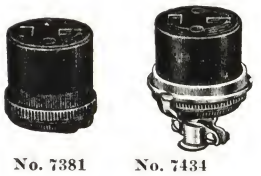
CAPS — 2-WIRE, 20 AMPERES

20 Amperes, 250 Volts



No. 7303 No. 7304 No. 7847 No. 7859 No. 7380

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7303	Composition 9/16"	10	30	4
7304	Armored Cord Grip 9/16"	10	30	6
7859	Bakelite, Cord Grip 9/16"	10	30	4
7847	Rubber, 5/8"	10	30	4
7527	5/8" (.625) Rubber	10	30	4
7380	Flush Motor Plug Cap	10	30	8



No. 7381 No. 7434

CORD CONNECTORS

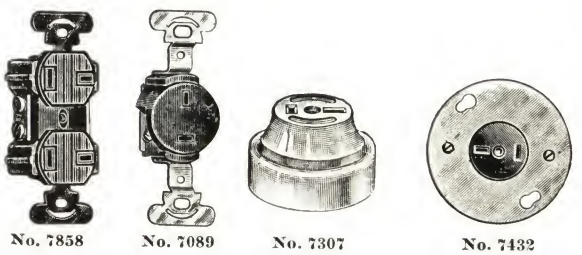
9/16-inch cord hole.

Center to center slot and blade spacing 27/32 inch. (.844).

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7381	Composition	10	30	8
7434	With Cord Grip, Armored	10	30	11

RECEPTACLES — 2-WIRE, 20 AMPERES

20 Amperes, 250 Volts



No. 7858 No. 7089 No. 7307 No. 7432

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7858*	Duplex, Bakelite	10	30	8
7860	Duplex, 4" Cover	10	30	12
7089†	Flush Receptacle 1" deep	10	30	6
7306	Surface Cleat Base	10	30	14
7307‡	Concealed Base, 2½"	10	30	14
7432	Single 3¼" Cover	10	30	10
7433	Single 4" Cover	5	30	21

* Takes two No. 7859 Caps and standard Duplex Plate.

† Takes standard Single Convenience Outlet Plate.

Cadmium finish covers are standard for Outlet Box Covers.

‡ Screw hole spacing 1½ inches.

H & H WIRING DEVICES

POLARIZED DEVICES

RECEPTACLES — 2-WIRE, 20 AMPERES

20 Amperes, 250 Volts



No. 7861

2-CIRCUIT DUPLEX RECEPTACLES

2-Wire, 20 Amperes, 250 Volts

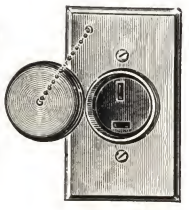
No. 7861 fits standard Duplex plates, and takes two No. 7859 caps.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7861	Duplex, Bakelite	10	30	8
7862	Duplex, with 4" Cover	10	30	12
7859*	Bakelite Cord Grip Cap, 9/16" (.562)	10	30	4

WEATHERPROOF POLARIZED RECEPTACLE

2-Wire, 20 Amperes, 250 Volts

Complete with aluminum finish brass plate and weatherproof mat. Use Caps 7859 or 7847.

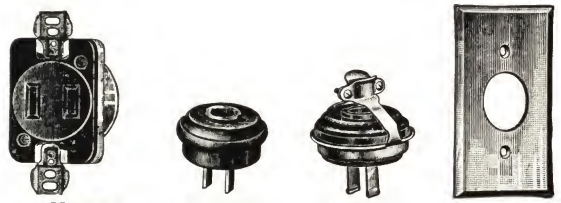


No. 7802

Cat. No.		Carton	Std. Pkg.	Pkg. Wt.
7802	Single-Gang	2	10	¾
7803	Two-Gang	2	10	8

RECEPTACLES — 2-WIRE, 30 AMPERES

30 Amperes, 250 Volts



No. 7438 No. 7437 No. 7436 No. 7439

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7437	21/32" Bakelite Cap*	5	30	19
7436	Same, with Cord Grip*	5	30	20
7438	Flush Receptacle	10	30	17
7439	.040" Brass Plate	10	30	5
91111	Brown Bakelite Plate	10	30	3
92111	Ivorylite Plate	10	30	3

* Gang installations must have a blank unit between each receptacle because of outside diameter of plugs.

Above plates have opening diameter of 1⅝ inches for No. 8345.

H & H WIRING DEVICES

POLARIZED DEVICES

RECEPTACLES — 3-WIRE, 10 AMPERES

15 Amp., 125 Volts; 10 Amp., 250 Volts

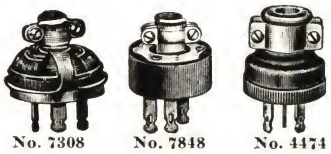


No. 7070 No. 7440 No. 4470

CAPS

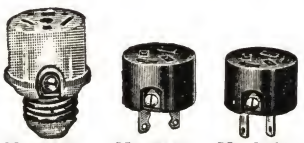
Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7070	Composition (.468)	10	50	7
7440	Composition, Pony (.406)	10	50	5
7457	Bakelite, Pony, (.281)	10	50	6
4470	Rubber, Pony (.468)	10	50	6
4471	Rubber, Pony (.625)	10	50	6

CORD GRIP CAPS



No. 7308 No. 7848 No. 4474

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7308	Armored, 15/32"	10	50	10
7848	Rubber, 9/16"	10	50	8
4429	Rubber, 13/32"–5/8"	10	50	8
4474	Rubber, Pony, 5/16"–15/32"	10	50	7
4475	Rubber, Pony, 5/8"	10	50	7



No. 7082 No. 7447 No. 7939

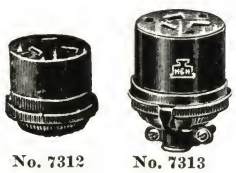
POLARIZED PLUG BASE AND ADAPTERS

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7082	Porc. Plug Base with Ground	10	100	25

Two-Three Wire Adapters

7447	Tandem Blades	10	30	6
7939	Parallel Blades	10	30	5

POLARIZED CORD CONNECTORS



No. 7312 No. 7313

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7312	Body 15/32"	10	50	12
7313	Armored Cord Grip Body, 15/32"	10	50	15



No. 7309

FLUSH MOTOR PLUG CAP

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7309	Motor Plug Cap	10	50	10

H & H WIRING DEVICES

POLARIZED DEVICES

RECEPTACLES — 3-WIRE, 10 AMPERES

15 Amp., 125 Volts; 10 Amp., 250 Volts



No. 7118

NON-REVERSING 3-WIRE DUPLEX



No. 7119

POLARIZED RECEPTACLES

Back Wired or Side Wired

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7118	Brown	10	30	12
7118-I	Ivorylite	10	30	12
7119	With 4" Cover	5	30	14



No. 7310



No. 7442



No. 7053



No. 7443



No. 7445

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7310	Single, Flush	10	50	15
7442	Single, 4-inch Cover	5	50	28
7053	Duplex, 4-inch Cover	5	30	14
7443	Round, with Ground	10	30	6
7444	Round, no Ground	10	30	6
7441	Single, with G. Shunt	10	50	16
7445	Duplex, Flush, Bakelite†	10	30	6
7445-I	Duplex, Flush, Ivorylite†	10	30	6
7311	Porcelain Receptacle	10	50	22

Flush receptacles take standard single and duplex plates. Two pony caps must be used for duplex receptacle.

POLARIZED CAPS

3-WIRE, 20 AMPS.

250 Volts



No. 7314 No. 7315 No. 7849

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7314	Composition, 5/8-inch	10	30	6
7315	Cord Grip, 5/8-inch	10	30	9
7849	Rubber, Cord Grip 5/8-inch	10	30	5

RECEPTACLES — 3-WIRE, 20 AMPERES

20 Amp., 250 Volts



No. 7316



No. 7456



No. 7317

Single Receptacles

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7316	Flush, Bakelite	10	30	6
7456	Bakelite, with 4" Cover†	5	30	13
7317	Surface, Concealed	10	30	14

†Will be supplied with ground shunt. Add "G" to catalog number. *Screw hole spacing 1¾ inches.

H & H WIRING DEVICES
POLARIZED DEVICES
3-WIRE, 20 AMPERES, 250 VOLTS


No. 7318


No. 7319

CORD CONNECTORS
3-WIRE, 20 AMPERES
250 Volts

Cat. No.	Description	Pkg. Wt.
7318	⅝-inch Cord Connector Body	13
7319	⅝-inch Armored Connector Body	16

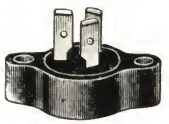
3-WIRE, 30 AMPERES, 250 VOLTS
CAPS


No. 7771


No. 7395

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7771	Bakelite, ¾-inch (.750)	2	10	5
7395	Bakelite, ¾" (.750), with Cord Grip and Ground Contacts	2	10	8

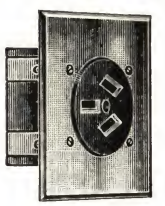

No. 7453


No. 7452

CORD CONNECTOR AND BASE

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7453	Cord Connector with Cord Grip (.625-1)	1	5	8
7452	Plug Base	1	5	4

POLARIZED RECEPTACLES, BRASS PLATES ARMORED CORD GRIP CAPS


No. 4518

3-Wire, 30 Amperes, 250 Volts
With Binding Screw Terminals

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
4520	Receptacle, Porcelain	2	5	8

3-Wire, 50 Amperes, 250 Volts
With Solder Lug Terminals

4523*	Receptacle, Porcelain	2	5	7

Brass Plates

4518	.060", 4½ x 4 9/16 inches	2	5	2
4519	Solid, 5½" Square	2	3	3

Armored Cord Grip Caps

4524*	Cord Hole, .875-1.218	2	5	4
4525*	Cord Hole, .625-.937	2	5	4

*Will be supplied Grounded. If desired, add "G" to the catalog number.

Receptacle fits standard two-gang box two inches deep or over.

RANGE AND POWER CAPS
50 Amperes, 250 Volts


No. 7952

Bakelite. 90° Angle Caps for Flush or Surface Range Outlets.

Has ground strap and built-in cable clamps. Solderless connections.

Cat. No.		Carton	Std. Pkg.	Pkg. Wt.
7952		2	10	8

H & H WIRING DEVICES
POLARIZED DEVICES — 3-WIRE, 50 AMPERES
50 Amperes, 250 Volts
FLUSH RANGE AND POWER OUTLETS, BAKELITE


No. 7987

Designed for 4-inch or 4 11/16-inch box and standard ¾-inch plaster cover. No special attachments required. Makes a neat, attractive appearance, inexpensive in cost and installation. Straight-in wiring and solderless connections make wiring easy. Receptacle is made of Bakelite with grounding slots and contacts in plate.

With Two-Screw Contacts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7987	Receptacle only	2	10	7
7990	Receptacle with .040" Plate	2	10	10
7991	Receptacle with .060" Plate	2	10	11

PLATES

For Flush Range Outlets Nos. 7987, 7935

Standard finish is brush brass. For special finishes add the usual advance for two-gang plates. Dimensions 4½ inches high, 4 9/16 inches wide. Standard 2-gang size.


No. 7988

With Ground Contacts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7988	.040-inch Brass	2	10	3
7989	.060-inch Brass	2	10	4

Without Ground Contacts

7898	.040-inch Brass	2	10	3
7899	.060-inch Brass	2	10	3

SURFACE RANGE AND POWER OUTLETS

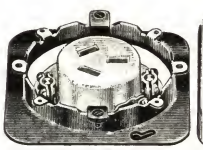

No. 7950

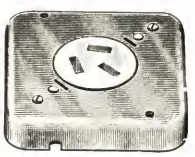
With built-in cable clamp interchangeable for back or bottom wiring. Has ¾ and 1-inch knockouts.

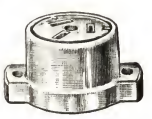
Two-Screw Contacts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7950	Bakelite	2	10	12

RECEPTACLES


No. 7398


No. 7738


No. 7402

Cat. No.	Description	Pkg. Wt.
7398	Flush, with Plaster Box Cover	17
7738	With Surface Box Galvanized Cover	20
7402	Porcelain Surface*	11

Standard package, 10; carton, 2.

No. 8285 flush receptacle fits standard boxes 4 11/16 inches square and not less than 2⅛ inches deep. It is equipped with a plaster cover of special construction for use with standard boxes. The finished plate is 5½ inches square, allowing an overhang over the box in order to make up for any irregularities in the plaster work.

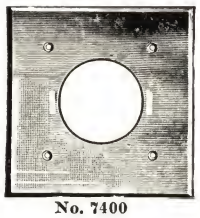
No. 7738 receptacle for surface work is furnished with a galvanized box cover to fit standard boxes 4 11/16 inches square and not less than 2⅛ inches deep.

* Will fit SP-72-C 102 cover for 4 11/16-inch outlet box.

H & H WIRING DEVICES

POLARIZED DEVICES

3-WIRE, 50 AMPERES, 250 VOLTS


No. 7400

PLATES FOR 3-WIRE 50 AMPERE RANGE RECEPTACLE

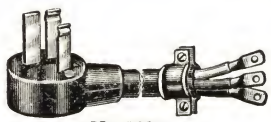
Standard finish is Brush Brass. For special finishes add twice the usual advance. Steel plate has straight edges and cadmium finish.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7399	Solid Brass, without Ground Contacts	2	10	9
7400	Solid Brass, with Ground Contacts	2	10	9
7401	.060" Steel, with Ground Contacts	2	10	5

THREE-WIRE RANGE CORD SETS

Bakelite Cap

Rubber Cord


No. 7927

35 Amps., 250 Volts, Two No. 8, One No. 10 Conductors

Cat. No.		Carton	Std. Pkg.	Pkg. Wt.
7927	36 Inches Long	2	10	18
7927-B	48 Inches Long	2	10	26

50 Amps., 250 Volts, Two No. 6, One No. 8 Conductors

7928	36 Inches Long	2	10	19
7928-B	48 Inches Long	2	10	33


No. 7951

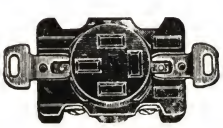
RANGE OUTLET GROUND STRAP

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7951	Ground Straps for No. 7950	2	10	2

POLARIZED DEVICES — 4-WIRE, 20 AMPERES

20 Amperes, 250 Volts


No. 7406


No. 7408

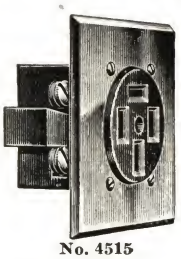

No. 7410

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7406	¾-inch C.G. Cap	5	20	5
7409	Cord Connector, (.437-.750) Armored C.G.	5	20	12
7408	Flush Receptacle, comp.	5	20	7
7410	Same with 4" Cover	5	20	13

Flush receptacle fits standard single convenience outlet plates. Gang installations must have a blank unit between each receptacle because of the outside diameter of the plugs.

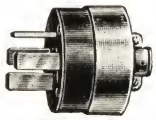
H & H WIRING DEVICES

POLARIZED DEVICES


No. 4515

4-WIRE, 60 AMPERE

60 Amperes, 250 Volts


No. 4517

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
4515	Porcelain Receptacle	1	5	10
4516	Straight Cap	1	5	17
4517	Straight Cap	1	5	8
4518	.060" Plate, 4½ x 4 9/16"	1	5	2
4519	Solid Plate, 5½" sq.	1	5	3

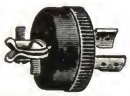
Soldering lugs on Nos. 4515, 4516 and 4517 accommodate No. 4 wires. Nos. 4516 and 4517 caps are steel covered, cadmium-plated, and accommodate cords up to 1.250" in diameter.

Standard finish, brush brass.

TWIST-LOCK DEVICES — 10 AMP. TWO-WIRE MIDGET CORD CONNECTORS


No. XT-7462


No. XT-7461


No. XT-7465


No. XT-7464

10 Amperes, 250 Volts; 15 Amperes, 125 Volts

Without Cord Grip — .375" Cord Hole

Cat. No.	Description	Pkg. Wt.
***XT-7461**	Connector Body Only	2½
XT-7462	Cap Only	1¼
XT-7477	Cap Only, Polarized	1¼

Carton, 10; Standard package, 50.

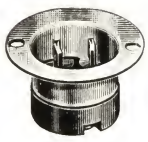
With Cord Grip — Clamp Spread .218" to .312"

***XT-7464**	Connector Body Only	3
XT-7465	Cap Only	1½
XT-7479	Cap Only, Polarized	1½

Carton, 10; Standard package, 50.

Standard finish for "Cord Grips" is Statuary Bronze.

TWIST-LOCK DEVICES — 10 AMP. TWO-WIRE MIDGET FLUSH MOTOR BASES


No. XT-7466


No. XT-7472


No. XT-7468

10 Amperes, 250 Volts; 15 Amperes, 125 Volts

Cat. No.	Description	Pkg. Wt.
XT-7466	Male Base	3
XT-7467	Male Base, Polarized	3
***XT-7468**	Female Base	3
XT-7473	No. XT-7468 Receptacle on 3¼" Steel Box Cover	6
***XT-7471**	Female Base, Covered Terminals without Cord Grips	3½
***XT-7472**	Female Base, Covered Terminals, with Cord Grips	4

Carton, 10; Standard package, 50.

* Will accommodate both polarized and non-polarized caps.

H & H WIRING DEVICES

TWIST-LOCK DEVICES

10-AMP., 2-WIRE BAKELITE CONNECTOR BODIES



No. XT-7503



No. XT-7506

10 Amperes, 250 Volts; 15 Amperes, 125 Volts

Cat. No.	Description	Cord Diameter	Pkg. Wt.
XT-7503	Connector Body	.375"	7
XT-7506	Body, Cord Grip	.296" to .562"	7

Carton, 10; Standard package, 50.

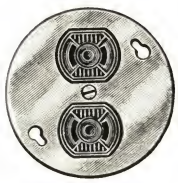
10-AMP., 2-WIRE RECEPTACLES



No. XT-7535



No. XT-7540



No. XT-7543

10 Amperes, 250 Volts; 15 Amperes, 125 Volts

Single Receptacles

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
XT-7535	Bakelite Receptacle	10	50	8
XT-7536	With 3¼" cover	10	30	10
XT-7537	With 4" cover	5	30	14

Duplex Receptacles

XT-7540	Bakelite Receptacle	10	50	13
XT-7543	With 3¼" cover	10	50	21
XT-7544	With 4" cover	5	30	15

Standard finish of covers is cadmium finish.

These receptacles may be used with either polarized or non-polarized Twist-Lock Caps.

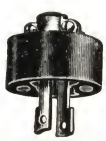
10 AMP., 2-WIRE PLUG CAPS



No. XT-7504



No. XT-7507



No. XT-7545



No. XT-7542

10 Amps., 250 Volts; 15 Amps., 125 Volts

Cat. No.	Description	Cord Diameter	Carton	Std. Pkg.	Pkg. Wt.
XT-7504	Bakelite	.375	10	50	6
XT-7507	Bakelite C.G.	.296–.562	10	50	6
*XT-7505	Bakelite	.375	10	50	6
*XT-7508	Bakelite C.G.	.296–.562	10	50	6
XT-7545	Rubber	.296–.562	10	50	6
XT-7546	Rubber	.406–.625	10	50	6
*XT-7547	Rubber	.296–.562	10	50	6
*XT-7548	Rubber	.406–.625	10	50	6
XT-7542	Armored	.296–.562	10	50	7
XT-7549	Armored	.406–.625	10	50	7
*XT-7588	Armored	.296–.562	10	50	7
*XT-7589	Armored	.406–.625	10	50	7

* Polarized — One wide and one narrow blade.

H & H WIRING DEVICES

TWIST-LOCK DEVICES

3-WIRE, 10-AMP. MIDGET CONNECTORS

10 Amp., 250 Volts; 15 Amp., 125 Volts



No. XT-7481



No. XT-7482

Without Cord Grip

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
XT-7481	Connector Body, .500 Cord Diameter	10	50	2½
XT-7482	Male Cap, .500 Cord Diameter	10	50	1¼

With Cord Grip

XT-7484	Connector Body, .281-.421 Cord Diameter	10	50	3
XT-7485	Male Cap, .281–.421	10	50	1½

3-WIRE, 10-AMP. MIDGET FLUSH BASES

10 Amp., 250 Volts; 15 Amp., 125 Volts



No. XT-7486



No. XT-7487

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
XT-7486	Male Base	10	50	3
XT-7487	Female Base	10	50	3
XT-7489	Female Base*	10	50	4
XT-7488	No. XT-7489 without Cord Grip	10	50	3½

* Covered terminals, with Cord Grips, Cord Hole, .281–.421.

10-AMP., 3-WIRE RECEPTACLES

10 Amp., 250 Volts; 15 Amp., 125 Volts

Bakelite



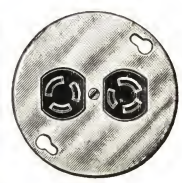
XT-7582



XT-7583



XT-7580



XT-7581

No. XT-7582 fits any standard single flush receptacle plate.

No. XT-7580 takes any standard duplex receptacle flush plate.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
XT-7582	Single Receptacle	10	50	9
XT-7583	With 3¼-inch Cover	10	30	11
XT-7584	With 4-inch Cover	5	30	13
XT-7580	Duplex Receptacle	10	50	11
XT-7581	With 4-inch Cover	5	30	15

If desired grounded, suffix letter "G" to the catalog number.

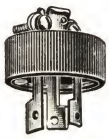
H & H WIRING DEVICES

TWIST-LOCK DEVICES

10-AMP., 3-WIRE POLARIZED CAPS



No. XT-7567



No. XT-7554



No. XT-7572

10 Amps., 250 Volts; 15 Amps., 125 Volts

Cat. No.	Description	Cord Diameter	Carton	Std. Pkg.	Pkg. Wt.
XT-7567	Rubber	.296–.562	10	50	7
XT-7568	Rubber	.406–.625	10	50	8
XT-7554	Bakelite	.296–.562	10	50	6
XT-7558	Bakelite	.406–.625	10	50	6
XT-7572	Metal Covered C'mp	.296–.562	10	50	6
XT-7573	Metal Covered C'mp.	.406–.625	10	50	6

3-WIRE BAKELITE CONNECTOR BODIES



No. XT-7555

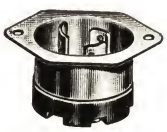
10 Amps., 250 Volts; 15 Amps., 125 Volts

Cat. No.	Description	Cord Diameter	Carton	Std. Pkg.	Pkg. Wt.
XT-7555	Body	.296–.562	10	50	8
XT-7559	Body	.406–.625	10	50	8

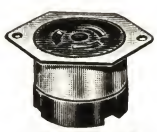
If desired grounded, suffix letter "G" to the number.

10-AMP., 3-WIRE MOTOR PLUGS

Polarized



No. XT-7556



No. XT-7557

10 Amps., 250 Volts; 15 Amps., 125 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
XT-7556	Bakelite, with Contact Blades	10	50	5
XT-7557	Bakelite, Female Flush Base	10	50	8

If desired grounded, suffix letter "G" to catalog number.

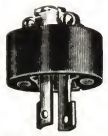
Supporting screw holes in Nos. XT-7556 and XT-7557 are 1⅛ inches on centers.

Diameter of bases, 1½ inches. Height of No. XT-7556, 1⅛ inches. Height of No. XT-7557, 1$\frac{11}{32}$ inches.

H & H WIRING DEVICES

TWIST-LOCK DEVICES

20 AMP., 2-WIRE PLUG CAPS



No. XT-9763



No. XT-7102



No. XT-7062

20 Amperes, 250 Volts

Rubber Cord Grip Caps

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
XT-9763	.296–.562 Cord Hole	10	30	5
*XT-9764	.296–.562 Cord Hole	10	30	5
XT-9765	.406–.625 Cord Hole	10	30	6
*XT-9766	.406–.625 Cord Hole	10	30	5

Metal Covered Cord Grip Caps

XT-7102	.296–.562 Cord Hole	10	30	5
*XT-9102	.296–.562 Cord Hole	10	30	5
XT-7238	.406–.625 Cord Hole	10	30	5
*XT-9103	.406–.625 Cord Hole	10	30	5

Composition Caps

XT-7062	.406 Cord Hole	10	50	6
*XT-7063	.406 Cord Hole	10	50	7

* Polarized — One wide and one narrow blade.

TWO-WIRE FLUSH RECEPTACLES



No. XT-7210



No. XT-7216

20 Amperes, 250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
XT-7210	Single Receptacle Porcelain	10	50	9
XT-7210B	Single Receptacle, Bakelite	10	50	10
XT-7216	With 3¼-inch Cover	10	50	21
XT-7216B	With 3¼-inch Cover, Bakelite	10	50	20
XT-7217	With 4-inch Cover	5	30	13
XT-7217B	With 4-inch Cover, Bakelite	5	30	15

Standard finish of covers is cadmium.

No. XT-7210 receptacle may be used with either polarized or non-polarized Twist-Lock Caps, and fits any standard single convenience outlet plate.



No. XT-7624

2-WIRE PORCELAIN RECEPTACLE

20 Amperes, 250 Volts

Mounting screws $\frac{31}{32}$ inch. Diameter 1¾ inches, height 1$\frac{27}{64}$ inches. Face diameter 1½ inches.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
*XT-7624	Receptacle	10	50	14

* Appleton Type "W" Unilet with their No. 5681 Cover accommodates No. XT-7624 Receptacle.

H & H WIRING DEVICES

TWIST-LOCK DEVICES

20 AMP. 2-WIRE CORD-GRIP CONNECTORS AND PLUG



No. XT-7101



No. XT-7612

20 Amperes, 250 Volts

Bakelite. Steel covered, cadmium plated.

Bodies may be used with either polarized or non-polarized caps. Cord Diameter: XT-7101, .296″ to .562″; XT-7224, .406″ to .625″.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
XT-7101	Bakelite Body	10	30	9
XT-7224	Bakelite Body	10	30	9
XT-7612	Screw Base Plug, 660 W., 250 V.	10	100	18

TWO-WIRE MOTOR PLUGS



No. XT-7191



No. XT-8808

20 Amperes, 250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
XT-7191	Surface Base, Comp. Male	10	30	4
*XT-9104	Surface Base, Comp. Male	10	30	4
XT-8808	Flush Base, Male	10	30	5
*XT-9105	Flush Base, Male	10	30	4

Bodies may be used with polarized or non-polarized bases.

* Polarized — One wide and one narrow blade. Metal container is nickel-plated.

THREE-WIRE CONDUIT BOX RECEPTACLE

20 Amperes, 250 Volts



No. XT-7329

Designed for permanent grounding from one contact to conduit system. Mounting screws 5/8-inch centers. Suitable for use with Crouse-Hinds "W" condulets and "O" cover, Appleton Electric Co. "W" unilets with No. 5680 cover, and Adalet fittings Nos. G2H, G3H and G4H.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
XT-7329	Receptacle, Porcelain	10	30	10

H & H WIRING DEVICES

TWIST-LOCK DEVICES

20 AMP. 3-WIRE POLARIZED CAPS AND CONNECTOR



No. XT-9965



No. XT-7311



No. XT-7313

20 Amp., 250 Volts, A.C. or D.C.—10 Amp., 575 Volts, A.C.

Cat. No.	Description	Cord Diameter	Pkg. Wt.
*XT-9965	Rubber	.437–.750	8
*XT-7311	Composition, Armored	.437–.750	8
XT-7313	Bakelite Body	.437–.750	11

Carton, 10; standard package, 30.

THREE-WIRE FLUSH RECEPTACLES



No. XT-7310



No. XT-7517

20 Amp., 250 Volts, A.C. or D.C. — 10 Amp., 575 Volts, A.C.

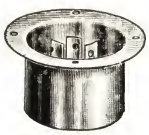
Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
*XT-7310	Porcelain Receptacle	10	30	11
XT-7310B	Bakelite Receptacle	10	30	9
XT-7517	With 4″ box cover attached	5	10	13
XT-7517B	With 4″ cover, Bakelite	5	20	10

No. XT-7310 takes standard single outlet plates.

THREE-WIRE MOTOR PLUGS



No. XT-7318



No. XT-7327

20 Amp., 250 Volts, A.C. or D.C.—10 Amp., 575 Volts, A.C.

Screw holes are spaced 120 degrees apart on 1¼″ radius for No. 8 screws.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
*XT-7318	Surface Base, Comp., Male	10	30	6
*XT-7327	Flush Base in Casing, Male	10	30	13

* If three- or four-wire Twist-Lock devices are desired with ground shunt from one contact to cover or casing, suffix letter "G" to catalog number.

H & H WIRING DEVICES

TWIST-LOCK DEVICES

20 AMP. 4-WIRE POLARIZED CAPS AND CONNECTOR


No. XT-9967


No. XT-7411


No. XT-7413

20 Amp., 250 Volts, A.C. or D.C.—10 Amp., 575 Volts, A.C.

Cat. No.	Description	Cord Diameter	Carton	Std. Pkg.	Pkg. Wt.
*XT-9967	Rubber	.437–.750	10	20	9
*XT-7411	Composition Armored	.437–.750	10	20	8
XT-7413	Bakelite Body	.437–.750	10	20	11

FOUR-WIRE FLUSH RECEPTACLES


No. XT-7410


No. XT-7417

20 Amp., 250 Volts, A.C. or D.C.—10 Amp., 575 Volts, A.C.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
XT-7410	Porcelain Receptacle	10	20	8
XT-7410B	Bakelite Receptacle	10	20	7
XT-7417	With 4" box cover attached	5	15	10
XT-7417B	With 4-inch cover, Bakelite	5	15	10
XT-7421	Single Plate, .060" Brass	10	20	6

FOUR-WIRE MOTOR PLUGS


No. XT-7415


No. XT-7408

20 Amp., 250 Volts, A.C. or D.C.—10 Amp., 575 Volts, A.C.

Screw holes are spaced 90 degrees apart.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
*XT-7415	Surface Base, Comp., Male	10	20	7
*XT-7408	Flush Base in Casing, Male	10	20	10

* If three- or four-wire Twist-Lock devices are desired with ground shunt from one contact to cover or casing, suffix letter "G" to catalog number.

H & H WIRING DEVICES

TWIST-LOCK DEVICES

"SEAL-TITE" RUBBER COVERS FOR TWIST-LOCK CONNECTORS

2-Wire, 3-Wire and 4-Wire Sizes

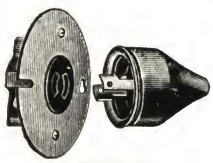
Protection Against Breakage and Moisture

Recommended as Lock-Fast Connectors in Packing Plants, Fire Departments, Breweries, Distilleries, Mines, Bottling Plants, Dairies, Tunnels and for general Industrial requirements.


No. XT-7510

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
XT-7510	For Nos. XT-7101 or XT-7102, 20A, 2-W.	10	30	5
XT-7521	Long Cover for No. XT-7101 when used with No. XT-7511, below	10	30	5
XT-7530	For Nos. XT-7311 or XT-7313, 20A, 3W.	10	30	6½
XT-7522	Long Cover for No. XT-7313 when used with No. XT-7531, below	10	30	5
XT-7569	For Nos. XT-7554 or XT-7555, 10A, 3-W.	10	30	5
XT-7435	For Nos. XT-7411 or XT-7413, 20A, 4-W.	10	20	4

Catalog number covers one-half only and does not include Connector, Cap or Wire. Two covers are required for each complete connector.


No. XT-7511

"SEAL-TITE" RUBBER COVERS

For Twist-Lock Caps

Used with Flush Receptacles

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
XT-7511	For No. XT-7102, Two-Wire Cap	10	30	4
XT-7531	For No. XT-7311, Three-Wire Cap	10	30	5½
XT-7541	For No. XT-7411, Four-Wire Cap	10	20	4

The No. XT-7511 type Rubber Cover is slightly shorter than those listed above for Cord Connectors, and is designed for use with "Twist-Lock" Flush Receptacles with steel box covers attached or with Standard Brass Flush Plates.

"SEAL-TITE" RUBBER COVERS

For Midget Twist-Lock Connectors


No. XT-7470 assembled to No. XT-7463 Connector

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
XT-7470	Rubber Cover	10	30	3

Catalog number covers one-half only and does not include Connector, Cap or Wire. Two are required for a complete Cord Connector.

H & H WIRING DEVICES

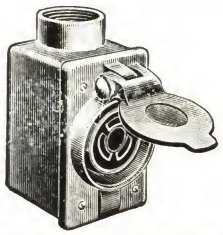
TWIST-LOCK DEVICES

30-AMPERE, 3-WIRE

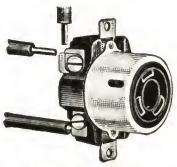
FLUSH RECEPTACLES AND PLATES, POLARIZED

With Solderless Connections

50 Amp., 250 Volts D.C., 30 Amp., 600 Volts, A.C.



No. XT-7380 and XT 7382 Assembled to Outlet Box*



No. XT-7380 **Two-way Wiring Solderless Connections

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
XT-7380	Flush Receptacle	2	5	3
XT-7381	Flush Receptacle, Grounded	2	5	3
XT-7382	Cast-Iron Plate, with lift cover	2	5	5½
XT-7383	Cast-Iron Plate, without lift cover	2	5	3

Standard finish is cadmium.

Receptacle and Plate will fit FS and FD Boxes.

* Outlet box not supplied.

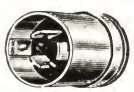
** The solderless wiring clamps can be swiveled so as to admit wire from end or bottom as shown.

50 AMPERE, 3-WIRE AND 4-WIRE POLARIZED CONNECTORS

Solderless Connections and Rubber Cable Grips



No. XT-7384



No. XT-7387

50 A. 250 V., D.C.
30 A. 600 V., A.C.

Three-Wire — Not Grounded

Cable Diameter	Female Body Cat. No.	Female Body Std. Pkg.	Female Body Car. ton	Male Cap Cat. No.	Male Cap Std. Pkg.	Male Cap Car. ton
.437 to .562	XT-7336	5	2	XT-7339	5	2
.562 to .687	XT-7346	5	2	XT-7346	5	2
.687 to .812	XT-7390	5	2	XT-7393	5	2
.812 to .937	XT-7384	5	2	XT-7387	5	2
.937 to 1.062	XT-7396	5	2	XT-7398	5	2
Three-Wire — Grounded to Casing*						
.437 to .562	XT-7337	5	2	XT-7340	5	2
.562 to .687	XT-7344	5	2	XT-7347	5	2
.687 to .812	XT-7391	5	2	XT-7394	5	2
.812 to .937	XT-7385	5	2	XT-7388	5	2
.937 to 1.062	XT-7397	5	2	XT-7399	5	2
Four-Wire — With Equipment Ground†						
.437 to .562	XT-7338	5	2	XT-7342	5	2
.562 to .687	XT-7345	5	2	XT-7348	5	2
.687 to .812	XT-7392	5	2	XT-7395	5	2
.812 to .937	XT-7358	5	2	XT-7359	5	2
.937 to 1.062	XT-7386	5	2	XT-7389	5	2

Weight Standard Package: Female Body, 7 lbs.; Male Cap, 5 lbs.

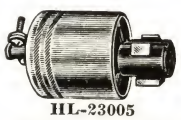
***Grounded** means that the long contact blade of the cap and the corresponding contact in the connector body and receptacle are eletrically connected to the OUTER CASING.

†**Equipment Ground** means that none of the contacts is electrically connected to the shell, but there is an additional terminal for the fourth wire, which is connected electrically to the OUTER CASING. This fourth wire is for equipment ground.

H & H WIRING DEVICES

HEAVY DUTY, 3-WIRE LOCKING DEVICES

Three-Wire Devices are regularly supplied "Ungrounded"



HL-23005

CORD CONNECTOR BODIES AND CAPS

10 A. 250 V. D.C., 460 V. A.C.
20 A. 125 V. A.C. or D.C.

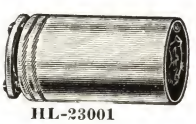
With Adjustable Cord Grips. Regularly supplied with ½-inch rubber discs located in neck of steel casings.

Catalog No.	Cable Dia. Inches	Description	Carton	Std. Pkg.	Pkg. Wt.
HL-23002	.296-.562	Body	5	20	9
HL-23005	.296-.562	Cap	5	20	8
HL-23003	.406-.625	Body	5	20	9
HL-23006	.406-.625	Cap	5	20	8

If desired with ground shunt from contact to cover or casing, add "G" to the catalog number.

CORD CONNECTOR With Rubber Cord Grips

10 A. 250 V. D.C.
460 V. A.C.
20 A. 125 V. A.C.
or D.C.



HL-23001



HL-23004

Regularly equipped with ½-inch sponge rubber discs located in neck of steel casings, and a specially designed dust-proof rubber cord-grip bushing.

Catalog No.	Cable Dia. Inches	Description	Carton	Std. Pkg.	Pkg. Wt.
HL-23001	.484-.609	Body	5	20	9
HL-23004	.484-.609	Cap	5	20	8
HL-23010	.360-.484	Body	5	20	9
HL-23011	.360-.484	Cap	5	20	8

If desired with ground shunt from contact to cover or casing, add "G" to the catalog number.

FUSIBLE CAPS 0-15 Amperes, 250 Volts



HL-23026

Standard finish is cadmium. Accommodates two standard 0-15 A. 250 V. cartridge fuses, or two Bussmann Fusetrons.

Catalog No.	Cable Dia. Inches	Description	Pkg. Wt.
HL-23025	.484-.609	With Rubber Cd. Gr.	16
HL-23028	.360-.484	With Rubber Cd. Gr.	16
HL-23026	.296-.562	With Adj. Met. Cd. Gr.	16
HL-23027	.406-.625	With Adj. Met. Cd. Gr.	16

Carton, 5; standard package, 20.

If desired with ground shunt from contact to cover or casing, add "G" to the catalog number.

RECEPTACLE AND CAST-IRON PLATES

10 A. 250 V. D.C.
460 V. A.C.
20 A. 125 V., A.C. or D.C.

Receptacle and Plates fit FS and FD Boxes or switch and outlet boxes, also single convenience outlet plate.

Standard finish is cadmium. Outlet Box is not supplied.



HL-23007



HL-23000

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
HL-23000	Bakelite Receptacle	5	20	8
HL-23007	Plate with Lift Cov.	5	20	13
HL-23008	Pl. without Lift Cov.	5	20	10

Supporting screws on receptacle spaced 3 9/32 inches.

If desired with ground shunt from contact to cover or casing, add "G" to the catalog number.

H & H WIRING DEVICES

HEAVY DUTY, 4-WIRE LOCKING DEVICES

4-Wire Devices are regularly supplied "Grounded"



HL-20414 HL-20415

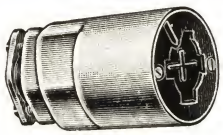
4-WIRE CORD CONNECTOR BODY AND CAP

20 A. 250 V. D.C.
30 A. 600 V. A.C.
With Adj. Cord Grips

Catalog No.	Cable Dia. Inches	Description	Carton	Std. Pkg.	Pkg. Wt.
HL-20414	.400-.750	Body	2	10	10
HL-20415	.400-.750	Cap	2	10	7

CORD CONNECTORS AND CAPS

With Rubber Cord Grips
20 A. 250 V. D.C.
30 A. 600 V. A.C.

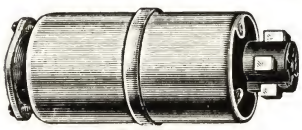


HL-21414 HL-21415

Regularly equipped with ½-inch thick sponge rubber discs located in neck of steel casings, and specially designed rubber cord-grip bushing which relieves all strain from terminals; also doubly protects terminal chambers from dust.

Catalog No.	Cable Dia. Inches	Description	Carton	Std. Pkg.	Pkg. Wt.
HL-21414	.360- .484	Body	2	10	10
HL-21424	.484- .609	Body	2	10	10
HL-21427	.609- .750	Body	2	10	10
HL-21418	.750-1.000	Body	2	10	10
HL-21415	.360- .484	Cap	2	10	7
HL-21425	.484- .609	Cap	2	10	7
HL-21426	.609- .750	Cap	2	10	7
HL-21419	.750-1.000	Cap	2	10	7

FUSIBLE CAPS — 0-30 Amperes, 250 Volts



HL-21421

Standard finish is cadmium. Accommodates 0-30 Amp. 250 V. cartridge fuses, or three Bussmann Fusetrons.

Catalog No.	Cable Dia. Inches	Description	Pkg. Wt.
HL-21421	.360- .484	With Rub. Cd. Gr.	14
HL-21431	.484- .609	With Rub. Cd. Gr.	14
HL-21432	.609- .750	With Rub. Cd. Gr.	14
HL-21422	.750-1.000	With Rub. Cd. Gr.	14
HL-20421	.400- .750	With Adj. Met. C. G.	14

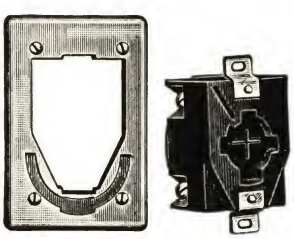
Carton, 2; standard package, 10.

RECEPTACLE AND CAST-IRON PLATES

20 A. 250 V., D.C.
30 A. 600 V., A.C.

Receptacle and Plates fit FS and FD Boxes.

Standard plate finish is cadmium.



HL-20417 HL-20403

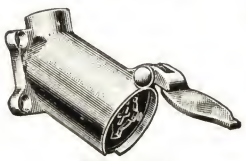
Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
HL-20403	Bakelite Receptacle	2	10	5
HL-20416	Plate with Lift Cover	2	10	9
HL-20417	Pl. without Lift Cover	2	10	4

Illustrations: All illustrations above and in first column are approximately one-quarter actual size.

H & H WIRING DEVICES

HEAVY DUTY, 4-WIRE LOCKING DEVICES

4-Wire Devices are regularly supplied "Grounded"



HL-21420
1-5 Actual Size

ANGLE WEATHERPROOF RECEPTACLE

With Spring Cover
Tapped for ¾" Conduit

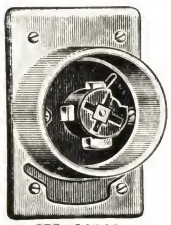
20 A. 250 V., D.C.
30 A. 600 V., A.C.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
HL-21420	Female	2	10	34
HL-21447	Male	2	10	34

MOTOR PLUG BASES

20 A. 250 V., D.C.
30 A. 600 V., A.C.

Devices are furnished complete as illustrated.

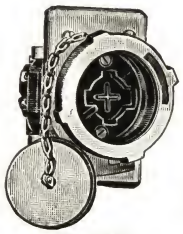


HL-20418
1-4 Actual Size



HL-20420

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
HL-20418	For FS and FD Boxes	2	10	16
HL-20420	For 3¼" Outlet Boxes	2	10	16



HL-22427

WATERTIGHT FEMALE RECEPTACLE

20 A. 250 V., D.C.
30 A. 600 V., A.C.

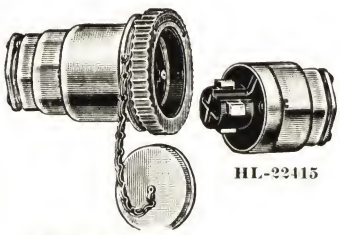
Receptacle and Plate fit FS and FD Boxes. Standard finish is cadmium.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
HL-22427	With Cast Bronze Plate and Sealing Ring	2	10	15

WATERTIGHT CONNECTOR BODIES AND CAPS

With Rubber Cord Grip

20 A. 250 V., D.C.
30 A. 600 V., A.C.



HL-22415

HL-22414 Body

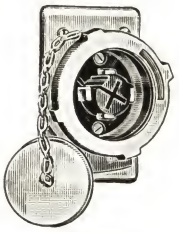
Catalog No.	Cable Dia. Inches	Description	Carton	Std. Pkg.	Pkg. Wt.
HL-22414	.360- .484	Con. Body	2	10	28
HL-22424	.484- .609	Con. Body	2	10	30
HL-22426	.609- .750	Con. Body	2	10	32
HL-22418	.750-1.000	Con. Body	2	10	32
HL-22415	.360- .484	Cap*	2	10	7
HL-22425	.484- .609	Cap*	2	10	9
HL-22422	.609- .750	Cap*	2	10	11
HL-22419	.750-1.000	Cap*	2	10	11

*Fits Watertight Connector Bodies HL-22414, etc., and Female Receptacle HL-22427.

H & H WIRING DEVICES

HEAVY DUTY, 4-WIRE LOCKING DEVICES

4-Wire Devices are regularly supplied "Grounded"



HL-22428

WATERTIGHT MALE RECEPTACLE

20 A. 250 V., D.C.
30 A. 600 V., A.C.

Receptacle and Plate fit FS and FD Boxes. Standard finish is cadmium.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
HL-22428	With Cast Bronze Plate and Sealing Ring	2	10	15

WATERTIGHT CONNECTOR BODIES FOR HL-22428 RECEPTACLE

With Rubber Cord Grip

20 A. 250 V., D.C. — 30 A. 600 V., A.C.

Catalog No.	Cable Dia. Inches	Description	Carton	Std. Pkg.	Pkg. Wt.
HL-22429	.360- .484	Body†	2	10	28
HL-22430	.484- .609	Body†	2	10	30
HL-22431	.609- .750	Body†	2	10	32
HL-22432	.750-1.000	Body†	2	10	32

†Fits Watertight Male Receptacle HL-22428.

CIRCUIT BREAKING DEVICES

Heavy Duty, 3- and 4-Wire Types

These devices are particularly suitable for a wide range of industrial applications. Portable heavy duty tools can be quickly connected with positive protection against shop hazards and interrupted production. Permanent industrial installations of Circuit Breaking Devices serve many calls for polarized outlets of an exceptionally rugged, serviceable design which withstands the hard knocks of factory or shop use.

Locking Feature: When the plug is inserted, a turn permanently locks it in position — proof against vibration, hard pulls or yanks.

Polarized: Clearly marked indications show proper position of Plug and Receptacle when connection is made. Plug can only be inserted in the proper position, thus maintaining the correct polarization.

Automatic Cap Ejector: A heavy coil spring returns the Bakelite plunger in the receptacle to the normal position when cap is withdrawn, and acts as an automatic ejector for the cap. This spring action assures a rapid break, aids in extinguishing the arc and prevents burned and pitted contacts.

H & H WIRING DEVICES

BAKELITE SOCKETS

250 Volts



VA VC VD VW

Knurled metal ring, furnished in Bakelite color, is supplied with each body for attaching cap.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
VA	Key, 250 Watts	10	100	21
VC	Keyless, 660 Watts	10	100	18
VD	Pull, 250 Watts	10	100	15
VW	Push, 660 Watts	10	100	18

BAKELITE CAPS



No. 171

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
171	⅛-inch	10	100	5
173	⅜-inch	10	100	6
177	Pendent	10	100	3
178	Pendent Cord Grip	10	100	7

COMPOSITION SOCKET BODIES



No. 216 No. 217

Key, 250 Watts
Keyless, 660 Watts
250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
216	Key	10	100	26
217	Keyless	10	100	17

COMPOSITION CAPS



CM CMG CA CLF

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
CM	Pendent	10	100	10
CMG	Pendent Cord Grip	10	100	18
CA	⅛-inch	10	100	12
CL	⅜-inch	10	100	14
CLF	½-inch	10	100	15
CB	½-inch Angle	10	100	26

Metal parts are brass, finished wash nickel, except pendent caps.

COMPOSITION ASSEMBLED SOCKETS

250 Volts

Cat. No.	Description	Watts	Carton	Std. Pkg.	Pkg. Wt.
7500	Key, ⅛-inch Cap	250	10	100	38
7501	Key, ⅜-inch Cap	250	10	100	40
7502	Key, Pendent Cap	250	10	100	36
7503	Key, Cord Grip Cap	250	10	100	44
7504	Keyless, ⅛-inch Cap	660	10	100	29
7505	Keyless, ⅜-inch Cap	660	10	100	31
7506	Keyless, Pendent Cap	660	10	100	27
7507	Keyless, Cord Grip Cap	660	10	100	35

H & H WIRING DEVICES

LUMILINE LAMPHOLDERS

660 Watts, 250 Volts

These lampholders, designed to fit Lumiline lamps, are supplied in black or white bakelite, either front or back connected styles. Single Lumiline sockets fit one lamp and the twin style supports two lamps in line.

There are two parts to each socket, the receptacle and cap. The cap snaps over the end of the Lumiline lamp and the circular contact goes into the receptacle with the contact screws facing inwards so that the flat surface is at the end of the lamp. Another lamp then can be installed very closely with only a small space between.



No. 7979-W



No. 7969



No. 7992

Receptacles

Front Connected

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7979	Single, Black	50	200	8
7979-W	Single, White	50	200	8

Back Connected

7969	Single, Black	50	200	6
7969-W	Single, White	50	200	6
7992	Twin, Black	50	200	9
7992-W	Twin, White	50	200	9



No. 7980-W



No. 7993

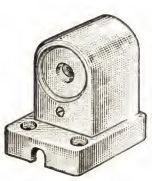


No. 7994

Caps for Lumiline Receptacles

7980	Shallow, Black	50	200	4
7980-W	Shallow, White	50	200	4
7993	Deep Type, Black	50	200	5
7993-W	Deep Type, White	50	200	5
7994	Black, with Switch	50	200	4
7994-W	White, with Switch	50	200	4

Switch Rating: 15 amp., 125 volt; 10 amp., 250 volt.



No. 7033-W

SLIMLINE FLUORESCENT LAMPHOLDERS

White Bakelite, 660 Watts

For ¾- and 1-inch diameter lamps. Single pin.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7033-W	High voltage end	10	100	22
7034-W	Low voltage end	10	100	22

H & H WIRING DEVICES

FLUORESCENT DEVICES

STARTERS



No. FS-2



No. FS-30



No. FS-85

Without Reset

Cat. No.	Size	Lamp Size Watts	Contact Pins	Carton	Std. Pkg.	Pkg. Wt.
FS-2	Med.	15, 20	2	10	100	3
FS-25	Med.	25	2	10	100	3
FS-4	Med.	30, 40	2	10	100	3
FS-85	Mog.	85, 100	2	10	50	2
FS85-4	Mog.	85, 100	4	10	50	3
FS-5	Min.	4, 6, 8	2	10	50	1
		With Automatic Reset*				
FS4-NA	Med.	40	2	10	100	3
FS85-NA	Mog.	85, 100	2	10	50	3
FS85-NA4	Mog.	85, 100	4	10	50	3
		With Manual Reset‡				
FS-20	Med.	15, 20	2	10	100	3
FS-30	Med.	30	2	10	100	3
FS-40	Med.	40	2	10	100	3
FS-850	Mog.	85, 100	2	10	100	5

* When the lamp burns out this Starter automatically locks out the dead lamp. After a short cooling period, a new lamp may be inserted and immediately lighted. Starter has no reset button.

‡ When burned out lamp is removed, the starter is reset by pressing button at the top. This starter locks out a dead lamp and eliminates blinking and flickering.



No. 7039

LAMPHOLDER, MINIATURE SIZE

75 Watts, 250 Volts

For 4, 6, 8 Watt Lamps

Cat. No.	Mounting	Color	Carton	Std. Pkg.	Pkg. Wt.
7039	Flush	Black	10	100	2
7039-W	Flush	White	10	100	2

MEDIUM SIZE

660 Watts, 250 Volts

For 15, 20, 30, 40 Wall Lamps



No. 7013



No. 7014



No. 7019

Lampholders

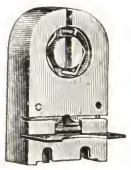
Cat. No.	Mounting	Color	Carton	Std. Pkg.
7013	Flush or Surface	Black	10	100
7013-W	Flush or Surface	White	10	100
7014	Flush	Black	10	100
7014-W	Flush	White	10	100
7024	18-inch Wire Leads	Black	10	100
7024-W	18-inch Wire Leads	White	10	100
	Lampholder with Starter Socket			
7019	Flush or Surface	Black	10	100
7019-W	Flush or Surface	White	10	100

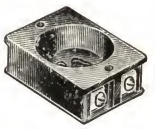
H & H WIRING DEVICES

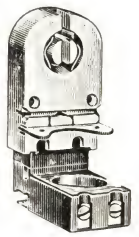
FLUORESCENT LAMPHOLDERS

MOGUL SIZE

660 Watts, 250 Volts
For 100 Watt Lamps


No. 7030-W


No. 7066


No. 7036-W

Lampholders

Cat. No.	Mounting	Color	Carton	Std. Pkg.
7030-W	With Bracket	White	10	50
7065-W	Without Bracket	White	10	50

Lampholder with Starter Socket
Takes 2 and 4 Pin Starters

7036-W	With Bracket	White	10	50
7037-W	Without Bracket	White	10	50

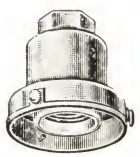
Starter Socket
Takes 2 and 4 Pin Starters

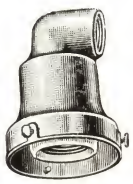
7066	For Separate or Remote Mtg.	Black	10	50

WEATHERPROOF SOCKETS

With One-Piece, Die-Cast Hood

660 Watts, 250 Volts


No. 1300


No. 1306


No. 1308

With 2¼-inch Shadeholder

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
1300	½-inch Hex. Cap	10	100	55
1306	90° Angle, ½-inch Cap	10	100	65

Without Shadeholder

1308	½-inch Hex. Cap	10	100	51

WITH SIX-INCH WIRE LEADS

660 Watts, 600 Volts


No. 9366


No. 43310-B


No. 43319

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
399	Porcelain, Plain	10	100	26
9366	Porcelain, Groove	10	100	26
43310	Comp., Groove	10	100	25
43310-B	Bakelite, Groove	10	100	13
43319	Bakelite, no Groove	10	100	13
60666	Comp., Groove	10	100	25

No. 14 B&S Stranded R.-C. Wire is standard.

H & H WIRING DEVICES

PIN TYPE, WEATHERPROOF SOCKETS

Brown Bakelite

With Suspension Hook

660 Watts, 250 Volts


No. 43308

Cat. No.	Socket	For Wires	Carton	Std. Pkg.	Pkg. Wt.
43308	Medium	12, 14	10	100	12
43318	Medium	10, 12	10	100	12
44408	Intermediate	16, 18, 20	10	100	4
33308	Candelabra	16, 18, 20	10	100	4

HUSK SOCKETS

With Body Terminals Plain Side


No. 1269


No. 1267

Cat. No.	Cap	Carton	Std. Pkg.	Pkg. Wt.
1269	Body Only	10	100	28
1263	⅛	10	100	32
1265	⅜	10	100	28
1266	½	10	100	28
1267	⅜ Angle	10	100	39


No. 7940

PORCELAIN DUPLEX SOCKETS

660 Watts, 250 Volts

For built-in cove lighting.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7940	With ⅜-inch Bushing	10	100	47
7941	With ⅛-inch Bushing	10	100	46

UTILITY EXTENSION SOCKETS

660 Watts, 250 Volts


No. 4360

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
4360	Two-Piece	10	100	35

ALUMINUM KEYLESS WEATHERPROOF SOCKET AND SHADEHOLDERS


No. 7971

ONE-PIECE STYLE

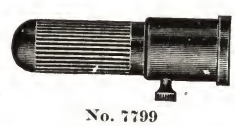
Has inside ring for holding porcelain body in the shell.


No. 7975

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7971	Socket, ⅜-inch	10	50	16
7972	Socket, ½-inch	10	50	15
7975	2¼-inch Shadeholder	10	50	2

RUBBER HANDLE SOCKET

250 Volts


No. 7799

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7799	Turn Knob, 250 Watts	10	20	6
7781	Keyless, 660 Watts	10	20	6

H & H WIRING DEVICES

ADJUSTABLE ANGLE ADAPTER

Adjustment, 180° Vertical, 340° Horizontal

660 Watts, 250 Volts



No. 4364



No. 4365

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
4364	Adjustable Adapter	10	100	18
4365	With 3¼" Galv. Cover	10	50	18
4366	With 4" Galv. Cover	10	50	25



No. 998

PORCELAIN PULL CANOPY RECEPTACLES

250 Watts, 250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
997	Seven-inch Chain and Insl.	10	100	33
998	Short Chain and 4-foot Cord	10	100	30

PORCELAIN RING RECEPTACLES

Competitive Type

Shallow, Keyless, 660 Watts



No. 7718



No. 7720



No. 7721



No. 7722

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7718	Screw Terminals, $\frac{13}{16}$"*	25	250	54
7720	Covered Terminals, 1⅛"*	25	250	64
7721	9 inches No. 14 Wire, ¾"*	25	250	64
7722	9 inches No. 18 Wire, ¾"*	25	250	57

* Depth of back.

PORCELAIN RING RECEPTACLES

Shallow, Keyless, 660 Watts, 250 Volts



No. 59108



No. 6092



No. 4003



No. 4043

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
59108	Screw Terminals	10	100	22
6092	Covered Terminals	10	100	27
4003	Weatherproof, 6" No. 14 Wire	10	100	27
4043	Screw Term., Shade-holder Ring	10	100	22

Depth of back, $\frac{13}{16}$-inch.



No. 61988

PORCELAIN RING RECEPTACLES

Deep, Keyless

660 Watts, 250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
61988	Screw Terminals, $1\frac{3}{16}$"*			

* Depth of back.

H & H WIRING DEVICES

SIGN AND FIXTURE PORCELAIN RECEPTACLES

660 Watts, 250 Volts



No. 9154



No. 5413



No. 3952



No. 148



No. 40488



No. 61072

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
9154	Screw Terminals	10	250	65
5413	1 Spr'g Stud, Octagon Base	10	250	65
7046	Clip Terminals	10	250	56
3951	Screw Term. Spring Stud	10	250	56
3952	Clip Term. Spring Stud	10	250	60
148	For Screwless Fixture	10	100	27
40488	Side Screw Terminals	10	100	20
61072	For Wood Signs, 1½" hole	10	100	23

1⅜-inch hole required except as noted. Screw hole spacings $1\frac{13}{16}$ inches, except No. 61072 which is $1\frac{13}{16}$ inches and 1⅞ inches, and No. 148 which is 1½ inches.

SURFACE CLEAT RECEPTACLES

660 Watts, 250 Volts



No. 50715



No. 50715-C



No. 9171



No. 9172



No. 9402

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
50715	Porcelain, $2\frac{7}{16}$" x $2\frac{7}{16}$"	10	100	26
50715-C	Bakelite, $2\frac{7}{16}$" x $2\frac{7}{16}$"	10	100	10
9171	Plain, $1\frac{15}{16}$" dia.	10	100	23
9172	Plain, $2\frac{5}{16}$" dia.	10	100	32
9402	Plain, $2\frac{15}{16}$" x $2\frac{23}{32}$"	10	100	39
9001	Groove, $2\frac{15}{16}$" x $2\frac{23}{32}$"	10	100	40

These receptacles are all Porcelain, except 50715-C.

Screw holes spacings $1\frac{15}{16}$ inches, except No. 9172 which is 1⅞ inches, and No. 9402 and No. 9001 which is 2⅜ inches.

CONCEALED PORCELAIN SURFACE RECEPTACLES

660 Watts, 250 Volts



No. 14000

$2\frac{5}{16}$ inches diameter; screw spacings, 1⅝ inches.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
14000	Plain	10	100	36
14001	Groove	10	100	39

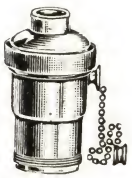
CIRCLE F WIRING DEVICES

BAKELITE SHELL SOCKETS

For Industrial Lighting — Screw Ring Cap


No. 8097-C


No. 8197-C


No. 8297-C


No. 8497-C

Key Socket — Medium Base

Cat. No.	Description	Rating Watts	Rating Volts	Carton	Std. Pkg.	Pkg. Wt.
8096-C	Pendant Cap	250	250	25	250	40
8097-C	⅛-in. Cap	250	250	25	250	40
8099-C	⅜-in. Cap	250	250	25	250	41

Keyless Socket — Medium Base

8196-C	Pendant Cap	660	250	25	250	37
8197-C	⅛-in. Cap	660	250	25	250	37
8199-C	⅜-in. Cap	660	250	25	250	38

Pull Chain* Socket — Medium Base

8296-C	Pendant Cap	250	250	25	250	36
8297-C	⅛-in. Cap	250	250	25	250	36
8299-C	⅜-in. Cap	250	250	25	250	36

Push-Thru Socket — Medium Base

8496-C	Pendant Cap	660	250	25	250	36
8497-C	⅛-in. Cap	660	250	25	250	36
8499-C	⅜-in. Cap	660	250	25	250	36

*For Pull Chain with Insulator suffix letter "X" to catalog number — i.e. 8296-CX.

BRASS SHELL SOCKETS

Multilok — Standard Size — Medium Base


No. 5252-C


No. 5052-C


No. 5152-C

Pull-Chain Socket

Cat. No.	Description	Rating Watts	Rating Volts	Carton	Std. Pkg.	Pkg. Wt.
5251-C	Pendant Cap	250	250	25	250	37
5252-C	⅛-in. Cap	250	250	25	250	39
5254-C	⅜-in. Cap	250	250	25	250	40

Key Socket

5050-C	Swivel Cap ..	250	250	25	250	43
5051-C	Pendant Cap	250	250	25	250	38
5052-C	⅛-in. Cap	250	250	25	250	40
5054-C	⅜-in. Cap	250	250	25	250	41

Keyless Socket

5151-C	Pendant Cap	660	250	25	250	43
5152-C	⅛-in. Cap	660	250	25	250	45
5154-C	⅜-in. Cap	660	250	25	250	46

BRASS SHELL SOCKETS

Multilok — Electrolier Size — Medium Base


No. 7162-C

TURN-KNOB SOCKET

For two filament lamps. $\frac{13}{16}$-in. removable extension knob. Dead shaft, no insulating sleeve required.

250 Watts — 250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
7162-C	⅛-in. Cap	25	250	50
7163-C	¼-in. Cap	25	250	51

CIRCLE F WIRING DEVICES

BRASS SHELL SOCKETS

Multilok — Electrolier Size — Medium Base


No. 6662-C


No. 6162-C

Push-Thru Socket

Cat. No.	Description	Rating Watts	Rating Volts	Carton	Std. Pkg.	Pkg. Wt.
6660-C	Swivel Cap ..	660	250	25	250	39
6661-C	Pendant Cap	660	250	25	250	32
6662-C	⅛-in. Cap	660	250	25	250	32
6663-C	¼-in. Cap	660	250	25	250	34
6666-C	Side Outlet Cap	660	250	25	250	34

Keyless Socket

6161-C	Pendant Cap	660	250	25	250	30
6162-C	⅛-in. Cap	660	250	25	250	30
6163-C	¼-in. Cap	660	250	25	250	33
6166-C	Side Outlet Cap	660	250	25	250	30

3200 LINE — BAKELITE DUPLEX SWITCHES RECEPTACLES AND PILOT LIGHTS

Brown or Ivory Bakelite


No. 3201


No. 3202


No. 3208-LB

Four practical combinations to fit a one gang switch box with standard duplex receptacle plate. Brown or Ivory bakelite.

Switch Rating	Receptacle
5 Amperes — 250 Volts	10 Amperes — 250 Volts
10 Amperes — 125 Volts	15 Amperes — 125 Volts

Single Pole Switch and Receptacle

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
3201	Brown	10	100	30
3201-I	Ivory	10	100	30

Two Single Pole Switches

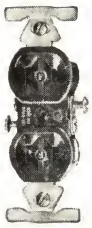
3202	Brown (Common Feed)	10	100	28
3202-I	Ivory (Common Feed)..	10	100	28
3210	Brown (Separate Feeds)	10	100	30
3210-I	Ivory (Separate Feeds)..	10	100	30

Pilot Light and Single Pole Switch

3208-LB	Brown, less bulb	10	100	35
3208-ILB	Ivory, less bulb.....	10	100	35

CIRCLE F WIRING DEVICES

BAKELITE FLUSH RECEPTACLES


No. 136


No. 135

Duplex receptacles No. 133, 134, 135, and 136 types contain large head 8/32 binding screws. Two of these are backed out and box screws are mounted in ears to make installation faster and easier. The wide ears are scored to permit easy removal.

All bakelite, brown or ivory.

Duplex Flush Receptacles

10 Amp., 250 Volts — 15 Amp., 125 Volts

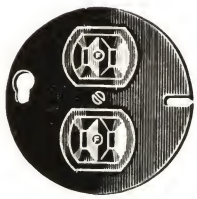
Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
	With Wide Ears			
133	Brown, Single Contacts..	10	200	28
133-I	Ivory, Single Contacts..	10	200	28
136	Brown, Double Contacts	10	200	29
136-I	Ivory, Double Contacts	10	200	29
	With Narrow Ears			
134	Brown, Single Contacts..	10	200	26
134-I	Ivory, Single Contacts..	10	200	26
135	Brown, Double Contacts	10	200	27
135-I	Ivory, Double Contacts	10	200	27

DUPLEX RECEPTACLE

With Outlet Box Cover

10 Amperes — 250 Volts
15 Amperes — 125 Volts

Cat. No.	Size Inches	Carton	Std. Pkg.	Pkg. Wt.
	Standard Contacts			
378	3¼	10	100	28
379	4	10	100	37
	Double Contacts			
380	3¼	10	100	28
381	4	10	100	37


No. 378

BAKELITE FLUSH TOGGLE SWITCHES

T Rated — For Type C Lamp Loads


No. 2035


No. 2036

These Switches are very small and compact. They are ruggedly constructed of the finest grade materials.

Both binding screws are backed out and on Nos. 2035 and 2036 types box screws are mounted in ears for faster installation. The wide ears on No. 2035 are scored.

Cat. No.	Description	Amperes 250V.	Amperes 125V.	Carton	Std. Pkg.	Pkg. Wt.
	With Wide Ears — Meets Federal Spec. WS-896					
2035	S.P., Brown	5	10	10	200	25
2035-I	S.P., Ivory	5	10	10	200	25
2038	3-Way, Brown	3	6	10	200	28
2038-I	3-Way, Ivory ..	3	6	10	200	28
	With Narrow Ears					
2036	S.P., Brown	5	10	10	200	24
2036-I	S.P., Ivory	5	10	10	200	24
2037	3-Way, Brown	3	6	10	200	27
2037-I	3-Way, Ivory ..	3	6	10	200	27

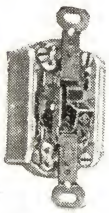
CIRCLE F WIRING DEVICES

STANDARD FLUSH SWITCHES

Toggle, Push and Lock Types


No. 9001-T


No. 5001-SB


No. 6004-S

Cat. No.	Description	Amperes 250V.	Amperes 125V.	Carton	Std. Pkg.	Pkg. Wt.
	Flush Toggle Switch — T-Rated — Bakelite Case					
9001-T	S.P., Brown..	5	10-T	10	200	34
9001-TI	S.P., Ivory ..	5	10-T	10	200	34
9003-T	3-Way, Brown	5	10-T	10	200	44
9003-TI	3-Way, Ivory	5	10-T	10	200	44
	Flush Push Switch — Bakelite Case					
5001-SB	Single Pole ..	5	10	10	200	36
5002-SB	Double Pole..	10	....	10	200	48
5003-SB	Three Way....	5	10	10	200	48
	Flush Push Switch — Lock Type — Bakelite Case					
5011-SB	Single Pole ..	5	10	10	200	34
5012-SB	Double Pole..	10	....	10	200	46
5013-SB	Three Way....	5	10	10	200	44
	Flush Toggle Switch — Bakelite Case					
6002-SB	Double Pole..	10	....	10	200	43
	Flush Toggle Switch — Porcelain Case					
6004-S	Four Way	2	5	10	200	64


No. 3010

SURFACE TOGGLE SWITCH

Porcelain base; Bakelite cover. Diameter of base, $1\frac{3}{32}$ inches; screw holes spaced, $1\frac{13}{32}$ inches.

Cat. No.	Description	Amperes 250V.	Amperes 125V.	Carton	Std. Pkg.	Pkg. Wt.
	Concealed Base					
3010	Single Pole	5	10	10	200	38
3015	Three Way	3	6	10	200	38
	Slotted Base					
3011	Single Pole	5	10	10	200	38
3016	Three Way	3	6	10	200	40

SURFACE TOGGLE SWITCH

Standard

Bakelite base and cover; slotted base. Diameter of base, $2\frac{3}{32}$ inches; screw hole spaced $1\frac{7}{16}$ inches.



No. 8000-B

Cat. No.	Description	Amperes 250V.	Amperes 125V.	Carton	Std. Pkg.	Pkg. Wt.
8000-B	Single Pole	3	6	10	200	29
8002-B	Three Way	1	3	10	200	31

CIRCLE F WIRING DEVICES


No. 2012

SURFACE TOGGLE SWITCH
For Outlet Box
With "T" Rated Bakelite Switch

Cat. No.	Description	Amperes 250V	Amperes 125V	Carton	Std. Pkg.	Pkg. Wt.
2012	S.P. on 3¼" Cover	5	10	5	100	40
2013	S.P. on 4 " Cover	5	10	5	50	26
2017	3-Way on 3¼" Cover	3	6	5	100	41
2018	3-Way on 4 " Cover	3	6	5	50	27

PENDANT SWITCH
6 Amperes — 125 Volts
3 Amperes — 250 Volts

Cat. No.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.
4161-C	10	250	35


No. 4161-C


No. 625

PULL CHAIN CURRENT TAP
Bakelite — Two Side Outlets
250 Watts — 250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
625	Brown	25	250	35
625-I	Ivory	25	250	35

BAKELITE TRIPLE CURRENT TAP
660 Watts — 250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
624	Brown	25	250	27
624-I	Ivory	25	250	27


No. 624


No. 638

BAKELITE 3-WAY TABLE TAP
10-Amp., 250 V. — 15 Amp., 125 V.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
638	Brown	10	250	44
638-I	Ivory	10	250	44

BAKELITE TWIN SOCKET
660 Watts — 250 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
602	Brown	25	250	26
602-I	Ivory	25	250	26



No. 602

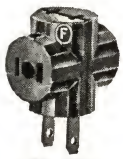

No. 632

BAKELITE CUBE TAP
Binding Screws — Pendant Opening
10 Amp., 250 V. — 15 Amp., 125 V.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
632	Brown	25	250	19
632-I	Ivory	25	250	19

CIRCLE F WIRING DEVICES

BAKELITE 3-WAY CUBE TAP
10 Amp., 250 Volts — 15 Amp., 125 Volts


No. 604

Cat. No.	Color	Description Blades	Carton	Std. Pkg.	Pkg. Wt.
604	Brown	Brass	25	250	20
604-I	Ivory	Brass	25	250	20

ARMORED CORD GRIP
Composition

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
114	Brass Blades, Brown	25	250	30


No. 114

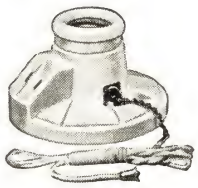

No. 614

ATTACHMENT PLUG BASE
Bakelite

Cat. No.	Color	Rating Watts	Rating Volts	Carton	Std. Pkg.	Pkg. Wt.
614	Brown	660	250	25	250	15
615	Black	660	250	25	250	15

PORCELAIN PULL RECEPTACLES
250 Watts — 250 Volts


No. 860-S


No. 864-S

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
	For 3¼-inch Box			
860	with 6" Chain	1	50	28
860-S	with 3" Chain, 3' Cord	1	50	28
861	with 6" Chain, Insulator	1	50	30
	Oversize Porcelain Pull Receptacles Mounts on 3¼- or 4-inch Box			
860-O	with 6" Chain	1	50	38
860-SO	with 3" Chain, 3' Cord	1	50	38
861-O	with 6" Chain, Insulator	1	50	40
	With Convenience Outlet in Base For 3¼-inch Box			
864	with 6" Chain	1	50	34
864-S	with 3" Chain, 3' Cord	1	50	34
865	with 6" Chain, Insulator	1	50	35
	Oversize—Mounts on ¾- and 4-inch Box			
864-O	with 6" Chain	1	50	40
864-SO	with 3" Chain, 3' Cord	1	50	40
865-O	with 6" Chain, Insulator	1	50	42

PORCELAIN PULL RECEPTACLE
Three Piece

Cat. No.	Rating Watts	Rating Volts	Carton	Std. Pkg.	Pkg. Wt.
	With 3" Chain, 3' Cord				
1020-S	250	250	10	100	35
	With 6" Chain				
1021	250	250	10	100	35
	With 6" Chain and Insulator				
1021-X	250	250	10	100	37
	With 3" Chain, 3' Cord and 6" Leads No. 18C.F. Wire				
1020-SL	250	250	10	100	38


No. 1020-S

CIRCLE F WIRING DEVICES

PORCELAIN OUTLET BOX RECEPTACLES

Keyless — 660 Watts — 250 Volts



No. 307



No. 372



No. 212

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
	Keyless—Open Terminals on Luminous Metal Cover			
306	Without Cover	10	250	49
307	For 3¼-inch Cover	1	100	39
308	For 4 -inch Cover	1	50	25
	6 Inches No. 14 R.C. Wire on Luminous Metal Cover			
372	For 3¼-inch Box	1	100	44
373	For 4 -inch Box	1	50	27
	Open Terminals—Flush Back with Shadeholder Groove			
212	For 3¼-inch Box	1	100	51
212-O	For 3¼- or 4-inch Box	1	50	36

No. 212-O is same size as regular 4-inch but with holes to fit 3¼- or 4-inch box. Nos. 212 and 212-O are supplied with drain holes to comply with R.E.A. specifications.



No. 333

TWO-PIECE ROSETTE

660 Watts — 250 Volts

Diameter of base, 2⅜ inches; height, $1\frac{13}{16}$ inches; supporting screw holes spaced $1\frac{7}{16}$ inches.

Concealed Base

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
333	Fuseless	10	100	37
327	Fusible	10	100	38

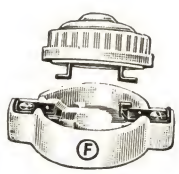
TWO-PIECE ROSETTE

660 Watts — 250 Volts

Dia. base 2¼ inches; over lugs 3 inches; height 1⅝ inches. Screw holes spaced 1½ inches.

Cleat Base

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
330	Fuseless	10	100	36
325	Fusible	10	100	37



No. 330

PORCELAIN RECEPTACLES

Medium Base — 660 Watts, 250 Volts



No. 226



No. 227



No. 292



No. 291

Cat. No.	Base Dia. Inches	Overall Dia., In.	Height Inches	Carton	Std. Pkg.	Pkg. Wt.
	Two Screw — No Shadeholder Groove					
226	$1\frac{13}{16}$	2½	1⅝	10	200	50
	Center Supporting Screw					
223	2	2½	1⅝	10	200	50
	Two Screw — Shadeholder Groove					
227	2	2½	1⅝	10	200	52
	Concealed Base — Open Wiring					
292	$2\frac{5}{16}$	.....	$1\frac{9}{16}$	10	100	30
	Two-Piece — Concealed Base					
291	$1\frac{13}{16}$	.....	$1\frac{9}{16}$	10	200	36

CIRCLE F WIRING DEVICES



No. TEC-233

BAKELITE FEED-THRU SWITCH

Single Pole

Cat. No.	Amperes 250V.	Amperes 125V.	Carton	Std. Pkg.	Pkg. Wt.
TEC-233	5	10	20	500	36

WEATHERPROOF SOCKETS

With Die Cast Metal Shell

660 Watts — 250 Volts



No. 385



No. 386

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
385	½-in. Hex. Pendant Cap and 2¼-in. Shadeholder	1	50	27
386	½-in. 90° Angle Cap and 2¼-in. Shadeholder	1	50	31

PORCELAIN SIGN RECEPTACLE

Medium Base

660 Watts — 250 Volts

$\frac{11}{16}$-inch deep body.

Cat. No.	Description	Pkg. Wt.
313	9-in. No. 18 C.F. Wire	39
314	9-in. No. 14 C.F. Wire	41

Standard package, 200; carton, 10.



No. 313

PORCELAIN SIGN RECEPTACLE

Medium Base

660 Watts — 250 Volts

$\frac{33}{32}$-in. shallow body.



No. 322

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
322	Screw Terminals	10	250	45

PORCELAIN SIGN RECEPTACLE

Medium Base

660 Watts — 250 Volts

Cat. No.	Description	Std. Pkg.	Pkg. Wt.
320	9-in. No. 18 C.F. Wire	200	40

Carton quantity, 10.



No. 320



No. 720

PORCELAIN TURN KNOB MOGUL SOCKET

For Two Filament Lamp

750 Watts — 250 Volts

For brackets, information on request.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
735	Body only	1	50	35
3735	Body only	1	50	35

CIRCLE F WIRING DEVICES


No. 1204-2

CENTER PULL CANDLE SOCKET

With Porcelain Pendant for Porcelain Brackets

250 Watts — 250 Volts

Cat. No.	Height Overall	Carton	Std. Pkg.	Wt. Lbs. Std.Pkg.
1204-2	2⅝	25	250	45

COMPOSITION SOCKET BUSHING

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
1257	For ⅛″ Nipple	100	500	2
1258	For ⅜″ Nipple	100	500	4


No. 1257


No. 3005

SHADEHOLDER FOR PORCELAIN SOCKETS

2¼ Inch

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
3005BB	Brass	12	144	5
3005NP	Nickel	12	144	5

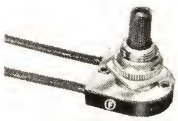
ROTARY CANOPY SWITCH

Black or Brown Bakelite

1A.-125V.T.—3A-125V.—1A-250V.

Cat. No.	Nipple	Carton	Std. Pkg.	Pkg. Wt.
1820	3/16	25	500	24
1825	5/16	25	500	24
1829	9/16	25	500	24


No. 1825


No. 1889

ROTARY CANOPY SWITCH

Straight Bakelite Knob

1A.-125V.T.—3A-125V.—1A-250V.

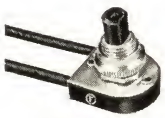
Cat. No.	Nipple	Carton	Std. Pkg.	Pkg. Wt.
1889	7/16	25	500	24

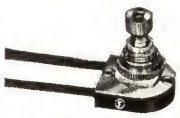
PUSH CANOPY SWITCH

With Metal Button

1A.-125V.T.—3A-125V.—1A-250V.

Cat. No.	Nipple	Carton	Std. Pkg.	Pkg. Wt.
1884	5/8	25	500	24
1885	13/32	25	500	24


No. 1885


No. 1890

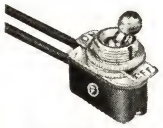
ROTARY CANOPY SWITCH

Brass Knob

1A.-125V.T.—3A-125V.—1A-250V.

Cat. No.	Nipple	Carton	Std. Pkg.	Pkg. Wt.
1890	13/32	25	500	24
1893	5/8	25	500	24

CIRCLE F WIRING DEVICES


No. 1886-XP

TOGGLE CANOPY SWITCH

With Standard Handle

Cat. No.	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
1886-XP	6	3	25	500	24

Furnished with 6 in. No. 18 C.F. wire. Mounts in ½-in. hole.

TWO-CIRCUIT ROTARY CANOPY SWITCH

With 7/16-in. Nipple

Cat. No.	Amperes 125V.	Amperes 250V.	Carton	Std. Pkg.	Pkg. Wt.
1873	3	1	25	500	34
1876	6	3	25	500	34


No. 1873


No.1850

SINGLE CIRCUIT CANOPY PULL SWITCH

1A.-125V.T.—3A-125V.—1A-250V.

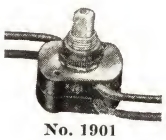
Cat. No.	Nipple	Carton	Std. Pkg.	Pkg. Wt.
1850	⅜	25	500	40
1851	½	25	500	44
1852	⅝	25	500	44

FLUORESCENT STARTER AND CONTROL SWITCH

Two Circuit

Leads furnished to suit requirements. F.L.S. 40W.-125V. AC.

Cat. No.	Nipple	Carton	Std. Pkg.	Pkg. Wt.
1901	13/32	Bulk	500	36


No. 1901

SLATER FLUSH MERCURY SWITCHES

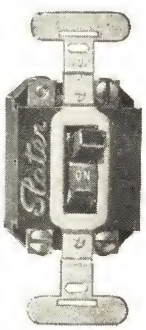
T-RATED

10-T Amp., 125 Volts — 5 Amp., 250 Volt

Licensed under Patents of General Electric Company



No. 491



No. 493

These switches fit standard switch boxes and must be installed vertically. "Top" stamped on mounting strap, shows correct position.

Cat. No.	Description	Amperes 125V	Amperes 250V	Std. Pkg.	Price Per 100
491	-Brown, Single Pole	10-T	5	100	**$99.00**
491-I	-Ivory, Single Pole..	10-T	5	100	**110.00**
492	-Brown, D'ble Pole	10-T	5	50	**187.00**
492-I	-Ivory, Double Pole	10-T	5	50	**198.00**
493	-Brown, Three-way	10-T	5	50	**187.00**
493-I	-Ivory, Three-way..	10-T	5	50	**198.00**

SLATER ELECTRICAL PRODUCTS



DUPLEX RECEPTACLES

Specification Type
T-Slot, Side-Wired
15 Amps., 125 Volts
10 Amps., 250 Volts

Cat. No.	Description	Std. Pkg.	Car-ton	Pkg. Wt.	Price Per 100
	With Plaster Ears				
300	Brown*	100	10	20	**$38.00**
300-I	Ivory....	100	10	20	**42.00**
	No Plaster Ears				
303	Brown*	100	10	20	**35.00**
303-I	Ivory....	100	10	20	**39.00**

*Bakelite.

DUPLEX RECEPTACLES

Parallel Slot—Side Wired
15 Amps., 125 Volts
10 Amps., 250 Volts



Cat. No.	Description	Std. Pkg.	Car-ton	Pkg. Wt.	Price Per 100
	No Plaster Ears				
350	Brown*	200	10	27	**$15.00**
350-I	Ivory....	200	10	27	**19.00**
	With Plaster Ears				
351	Brown*	200	10	27	**18.00**
351-I	Ivory....	200	10	27	**22.00**

*Bakelite.



FLUSH TUMBLER SWITCHES

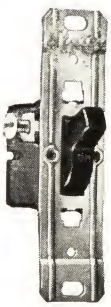
Specification Type—T-Rated
10-T Amps., 125 Volts
5 Amps., 250 Volts

Cat. No.	Description	Std. Pkg.	Car-ton	Pkg. Wt.	Price Per 100
	Single Pole—With Plaster Ears				
400	Brown*	100	10	14	**$38.00**
400-I	Ivory....	100	10	14	**43.00**
	Three Way—With Plaster Ears				
403	Brown*	50	10	8	**48.00**
403-I	Ivory....	50	10	8	**53.00**
	Single Pole—No Plaster Ears				
410	Brown*	100	10	12	**32.00**
410-I	Ivory....	100	10	12	**36.00**
	Three Way—No Plaster Ears				
413	Brown*	50	10	7	**42.00**
413-I	Ivory....	50	10	7	**47.00**

*Bakelite.

FLUSH TUMBLER SWITCHES

Residential Type—Bakelite
10A., 125V.—5A., 250V.



Cat. No.	Description	Std. Pkg.	Car-ton	Pkg. Wt.	Price Per 100
	Single Pole—With Plaster Ears				
420	Brown	100	10	13	**$27.00**
420-I	Ivory..	100	10	13	**31.00**
	Three Way—With Plaster Ears				
423	Brown	100	10	7	**35.00**
423-I	Ivory..	100	10	7	**40.00**
	Single Pole—No Plaster Ears				
450	Brown	100	10	13	**23.00**
450-I	Ivory..	100	10	13	**28.00**
	Three Way—No Plaster Ears				
453	Brown	100	10	7	**34.00**
453-I	Ivory..	100	10	7	**39.00**

SLATER ELECTRICAL PRODUCTS

COMBINATION KEYLESS PORCELAIN LAMPHOLDERS

Duplex Screws—Specification Grade

600 Watts—600 Volts



This combination Keyless Lampholder is equipped with four large screw terminals. Duplex terminals eliminate splicing, soldering or taping, and allow the circuit to be run straight through. Extra large screws, backed out ready to use. Will take No. 10 wire. Ample wiring room. Shade holder groove, washer head screws for mounting.

Cat. No.	Description	Outside Dia., In.	Std. Pkg.	Car-ton	Pkg. Wt.	Price Per 100
297	Keyless for 3¼- or 4-inch box	4 11/16	50	5	38	**$42.00**

COMBINATION PORCELAIN LAMPHOLDERS

One Piece Specification Grade Pull
(Interior Replaceable)



New design eliminates the old-type screw ring. Equipped with the Slater No. 215 pull chain interior. This device is designed for quick wiring at a minimum cost. Shade holder groove.

Cat. No.	Description	Outside Dia., In.	Std. Pkg.	Car-ton	Pkg. Wt.	Price Per 100
294	Comb. for 3¼- or 4-inch box	4 11/16	50	1	54	**$60.00**

BELL NO-SHOK SAFETY DEVICES

NO-SHOK SAFETY DUPLEX RECEPTACLES



Engineered to prevent accidents and save lives, this highly acclaimed Safety receptacle provides protection for the home and a most vital need in industry.

With its positive snap-back spring action, face is closed when plug is withdrawn. Prevents tampering by unsuspecting children — no longer can shock, burns, or death be incurred through insertion of hairpins, wires, scissors, etc., into current carrying terminals. In industry — keeps out metal chips, or wood shavings — prevents entry of dust, dirt, or splashed liquids.

Thick double walls of bakelite separating and insulating heavy duty terminals — lifetime spring action — firmer plug grasp, positive contact always. Large binding screws provide easy wiring.

Listed as standard by Underwriters' Laboratories, Inc.

10 Amp., 250 Volts—15 Amp., 125 Volts

Cat. No.	Color	Carton	Std. Pkg.	Shpg. Wt. Lbs.	Price Per 100
B-1003	Brown	25	200	37	$49.00
B-1004	Ivory	25	200	37	58.00
*B-1003	Brown	10	100	18½	49.00
*B-1004	Ivory	10	100	18½	58.00

*Also packaged individually carded, 10 units to a carton, 100 units standard package.

NO-SHOK SAFETY EXTENSION CORD SETS



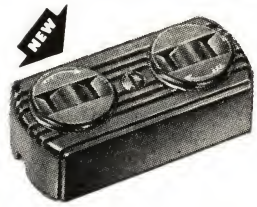
Individually packaged in attractively illustrated cellophane bags. Incorporates the desired No-Shok features. Protection for the family plus firmer contact. Added safety when used with appliances, lamps, small tools, Christmas tree lights, etc. Available in brown POSJ or ivory POT 6, 9, 12, 15 ft. lengths. Underwriters' Laboratories approved.

10 Amp., 250 Volts—15 Amp., 125 Volts

Cat. No.	Length Feet	Color	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
B-304	6	Brown	5	50	15	$69.00
B-305	6	Ivory	5	50	15	75.00
B-306	9	Brown	5	50	19	79.00
B-307	9	Ivory	5	50	19	85.00
B-308	12	Brown	5	50	23	89.00
B-309	12	Ivory	5	50	23	95.00
B-310	15	Brown	5	50	27	99.00
B-311	15	Ivory	5	50	27	105.00

BELL NO-SHOK SAFETY DEVICES

NO-SHOK SAFETY TABLE TAPS



Packed individually on Prize-Winning Cards. No-Shok Safety features — plus rugged construction. Thick double walls of bakelite insulating heavy duty contacts. Available in brown and ivory. UL approved.

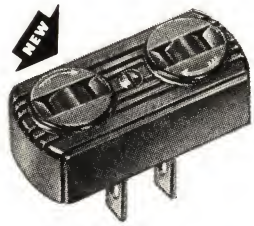
10 Amp., 250 Volts—15 Amp., 125 Volts

Cat. No.	Color	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
*B-300	Brown	10	100	15	$28.00
*B-301	Ivory	10	100	15	32.00

*Also packaged individually carded, 10 units to a carton, 100 units standard package.

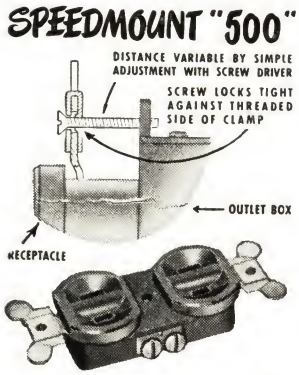
NO-SHOK SAFETY CURRENT TAPS

Packaged on Prize Winning individual display cards. A sure fire over-the-counter item. Provides the No-Shok Safety feature, compactness, smart design. Can be inserted side by side in Duplex Receptacles for additional outlets. Protection against shocks, burns, and short circuit.



Cat. No.	Color	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
B-302	Brown	10	100	17	$30.00
B-303	Ivory	10	100	17	35.00

BELL SPEEDMOUNT DUPLEX RECEPTACLES



Adjustable clamps provide fast, accurate flush mounting. Ruggedly made of bakelite with double thick walls for separating and insulating heavy-duty terminals. Speedmount "500" duplex receptacles are equipped with adjustable threaded clamps—plus plaster ears — for accurate flush mounting installations. No fuss with washers or broken wall plates — Speedmount "500" with its ingenious clamps enables jiffy-quick installations—tailor-made to insure mounting flush with wall or baseboard when outlet boxes are installed too deeply or not lined up properly.

Also available—two circuit receptacles with or without Speedmount clamps.

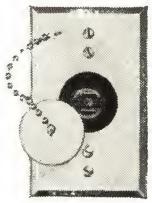
15 Amp., 125 Volts—10 Amp., 250 Volts

Cat. No.	Color	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
B-500	Brown	10	100	18	$35.00
B-501	Ivory	10	100	18	42.00
	Bell Standard Duplex Receptacles				
B-502	Brown	10	100	18	32.00
B-503	Ivory	10	100	18	38.00
	Two Circuit Receptacles				
B-504	Brown	10	100	18	36.00
B-505	Ivory	10	100	18	43.00

PERFECT-LINE WIRING DEVICES

WEATHERPROOF FLUSH RECEPTACLES

Screw Cover Type



No. WR-53

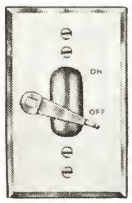
Designed for outdoor residential and industrial installations and for interior use where excessive moisture is present. Single or duplex receptacle with aluminum finish brass plate, screw cap and bead chain and weatherproof gasket. Individually packed. 15 amp., 125 volt; 10 amp., 250 volts.

Cat. No.	Description	Std. Pkg.	Price Per 100
WR-53	W.P. Single Receptacle..	50	**$151.80**
DWR-63	W.P. Duplex Receptacle	10	**278.00**
TWR-53	W.P. Single, T-Slot	50	**186.00**

WEATHERPROOF FLUSH SWITCH

Designed for outdoor and industrial installations and for interior use where excessive moisture is present.

Boxed individually; 5 to a carton standard packing as listed; all mounting screws and weatherproof gaskets included. .040-inch brass, aluminum finish.



SW-1

Cat. No.	Description	Switch Rating 125V	Switch Rating 250V	Std. Pkg.	Wt. Pkg.	Price Per 100
SW-1	Single Pole Switch	10-T	5	25	10	**$170.00**
SW-2	Double Pole Switch	10-T	10	10	6	**250.00**
SW-3	3-Way Switch	10-T	5	10	6	**195.00**
SW-4	4-Way Switch	5-T	2	5	4	**432.00**

PERFECT-LINE DOOR SWITCHES

Narrow Box Type



DN-415

An ideal switch for closet, pantry, dark room and refrigerator lights. Furnished complete, ready for installation. Consists of metal box with two ½-inch knockouts in back, cover, necessary screws, striking plate and switch. Switch has wire leads, and adjustable plunger. Outside dimensions: $2\frac{11}{16}$x$1\frac{5}{16}$x2 inches deep. Cover $1\frac{5}{16}$x4 inches. U-L approved.

6 Amp., 125 Volt; 3 Amp., 250 Volt A.C.

Cat. No.	Description	Wt. Lbs. Carton	Std. Pkg.	Std. Pkg.	Price Each
DN-415	"On" When Door is Open	5	25	34	**$2.20**
DF-415	"Off" When Door is Open	2	10	12	**2.20**

ELECTRIC CLOCK HANGER OUTLET

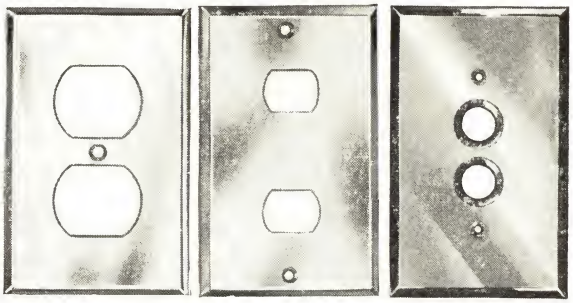
Equipped with integral hook for hanging clock. 15-A-125V; 10A-250V.

Boxed individually; 25 to a carton, 100 to a standard package; shipping weight, standard package, 28 lbs. All mounting screws included.

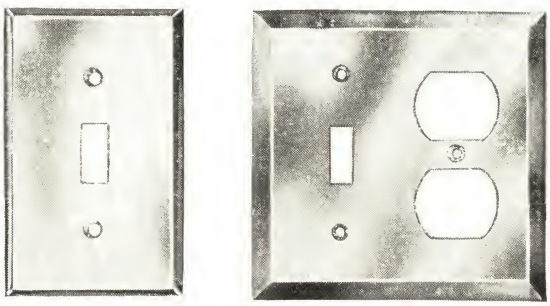


Cat. No.	Finish	Price Per 100
CR53	Spray Brass	**$60.00**
CR53-C	Polished Chrome ..	**80.00**

HONER SWITCH AND WALL PLATES



No. 1001 No. 902 No. 801



No. 1101 No. 1301

All plates are packed in individual envelopes with the necessary number of plated screws. All chrome plated plates are paper covered.

Single Gang Plates: Standard package, 250; carton quantity, 25. Two Gang Plates: Standard package, 100; carton quantity, 10. Three and Four Gang Pates: Packed in individual boxes.

Single Gang Plates

Description	Chrome on Steel	Chrome on .040 Brass	Ivory Wrinkle
Telephone	701	3701	2701
Push Button	801	3801	2801
Interchangeable 1 hole....	901	3901	2901
Interchangeable 1 V hole	901V	3901V	2901V
Interchangeable 2 hole....	902	3902	2902
Interchangeable 3 hole....	903	3903	2903
Single Receptacle	1000	3000	2000
Duplex Receptacle	1001	3001	2001
Toggle Switch	1101	3101	2101
Blank	1201	3201	2201

Two Gang Plates

Push Button	802	3802	2802
Interchangeable 2 hole....	9012	39012	29012
Interchangeable 4 hole....	9022	39022	29022
Interchangeable 6 hole....	9032	39032	29032
Duplex Receptacle	1002	3002	2002
Toggle Switch	1102	3102	2102
Blank	1202	3202	2202
Combination	1301	3301	2301

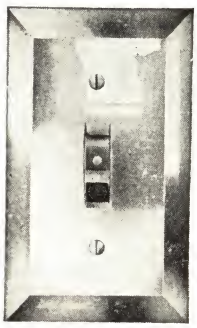
Three and Four Gang Plates

3 Gang Toggle Switch	1103	3103	2103
3 Gang Combination	1303	3303	2303
4 Gang Toggle Switch	1104	3104	2104

BOX COVERS

Description	Cat. No.	Std. Pkg.
Duplex, 4-inch round, galvanized	**400**	100
Blank, 4-inch round, galvanized	**300**	100

HARING MIRROR GLASS SWITCH PLATES



TUMBLER SWITCH PLATES

Cat. No.	Description	Carton Qty.
101	1 Gang Toggle	10
102	2 Gang Toggle	5
103	3 Gang Toggle	5
104	4 Gang Toggle	1
105	5 Gang Toggle	1
106	6 Gang Toggle	1

COMBINATION SWITCH PLATES

No.	Description		Carton Qty.
101R	2 Gang Plate	1 Toggle-Recep.	5
102R	3 Gang Plate	2 Toggle-Recep.	5
103R	4 Gang Plate	3 Toggle-Recep.	1
101DR	2 Gang Plate	1 Toggle-Duplex	5
102DR	3 Gang Plate	2 Toggle-Duplex	5
103DR	4 Gang Plate	3 Toggle-Duplex	1

RECEPTACLE PLATES

Single Receptacle

Cat. No.	Description	Carton Qty.
100R	1 Gang Recep.	10

Duplex Receptacle

100DR	1 Gang Duplex	10



TOUCH-PLATE LOW-VOLTAGE REMOTE CONTROL

GANG BOXES

For Group Mounting of Relays



No. 1620



No. GB9

No. 120 made to receive up to 15 No. 1550-A relays, one No. 78K1 24V transformer and one 17C converter. Adequate K.O.'s provided for 115-volt runs.

The 115V wiring is within the box and low-voltage connections are outside the box. Dimensions: 5x20x4 inches. For surface mounting only.

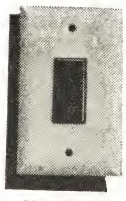
No. GB9 made to receive nine No. 1550-A relays (can receive 15 with 6 relays open-wired on low-voltage side), one No. 78K1 24V transformer, one No. 17C converter and six 10V K.O. mounting type transformers. All 115V and low-voltage connections with box. Dimensions: 9x24x4 inches.

No. GB9 should be used when Master Panels are installed and can be either surface or flush mounted.

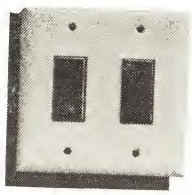
Cat. No.	Description	Carton	Std. Pkg.	Shpg. Wt. Lbs.	Price Each
1620	Gang Box	1	4	32	$ 9.00
GB9	Gang Box	1	1	17	14.00

TOUCH-PLATE LOW-VOLTAGE REMOTE CONTROL SWITCH SYSTEM

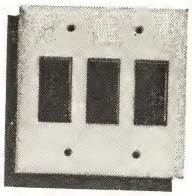
TOUCH-PLATE SWITCHES



No. 1400A



No. 1400B



No. 1400C

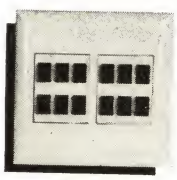
Low-voltage momentary contact switches only should be used to operate Touch-Plate Relays. All wiring to the Touch-Plate switches is open run low voltage — no conduit necessary.* NO BOX NEEDED because of low voltage.* Mounting holes fit standard outlet boxes or switch plaster rings (these can be nailed directly to studs). Touch-Plate switches can be attached directly to plywood, etc. Wire in parallel for multiple switches. Single Touch-Plate switches fit single box or plaster rings. (Both 2- and 3-gang Touch-Plate switches fit 2-gang box or plaster rings.) Available in both ivory and brown with either ivory or brown buttons. Specify colors when ordering.

Cat. No.	Description	Carton	Std. Pkg.	Shpg. Wt. Lbs.	List Price
1400A	Single Gang	10	100	15	$0.90
1400B	2 Gang	10	50	13	1.80
1400C	3 Gang	10	50	3	2.70

MASTER PANELS



No. CC-6



No. CC-12

The Touch-Plate Master Panels provide a central point (such as the master bedroom) where one can see instantly which houselights are on or off — and individually control those lights from that point. Women often prefer two Master Panels: one at the garage (to turn on all lights before entering the house), the other in the bedroom (to turn off what lights remain on). The second Master Panel is in parallel to the first.

The CC-6 has 6 and the CC-12 has 12 low voltage RED Touch-Buttons with indicator lamps glowing through the buttons. All touch buttons control individual relays (1550-A) mounted in the GB9 gang boxes (the same relays controlled by Touch-Plate switches in individual rooms). The low-voltage indicator lamps are controlled by individual 10V transformers, also in GB gang boxes, which are wired in parallel with individual fixtures.

A touch-button trips the No. 1550-A relay which turns on the light and the 10V transformer, which in turn lights the indicator lamp on the Master Panel — indicating the fixture is on.

Touch-Plate Master Panels mount to single and double plaster ring (flush device raised covers) or where code requires boxes, mount to extra deep 3½-inch switch box, or use universal No. 72171 box with single or double raised cover.

Cat. No.	Description	Carton	Std. Pkg.	Shpg. Wt. Lbs.	List Price
CC- 6	Master Panel.....	1	1	1	$17.50
CC-12	Master Panel.....	1	1	1½	30.00

*Consult local codes.

TOUCH-PLATE LOW-VOLTAGE REMOTE CONTROL SWITCH SYSTEM



Touch-Plate is a remote control, low-voltage switch system which, at only slightly more than the cost of conventional wiring, makes possible many advantages:

Adequate Switching. Switches at every entrance to every room. No more groping in the dark, no more lights burning needlessly. Complete switching convenience.

Control Center. Master Panel shows which lights are on and which are off and provides control of these lights from panel.

Easy Operation. The lightest touch of hand or elbow turns lights on or off.

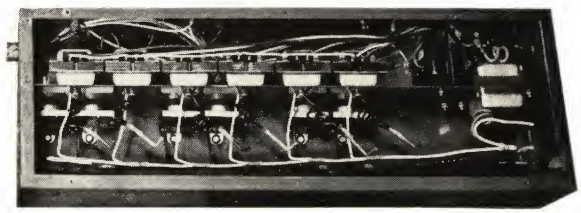
Safety. Low-voltage is free from injurious shock. No danger of stumbling in dark room. All lights turned on provides protection from intruder.

Silence. Completely noiseless operation of wall switches.

Beauty of Design. The Touch-Plate switches enhance the decorative scheme of the home.

For installation and method of bidding data obtain Touch-Plate Forms No. C-109 and C-111.

No. 6 CONTROL UNIT



This pre-wired color coded assembly simplifies wiring of remote control systems and makes possible easy understanding of the circuit. All leads are tagged and 115-volt fixture leads match in color to low voltage wires controlling those fixtures. This assembly also makes the figuring for bids simple because costs are standardized. Colored wiring diagram on inside cover of the assembly makes tracing of circuits simple so that even the apprentice electricians easily understand the wiring.

The No. 6 Control Unit consists of the following items completely wired at factory — with color coded pig-tails:

1—GB9 Gang Box
1—78K1 Transformer
1—17C Converter
6—1550A Relays
6—10V Indicator Light transformers.

Standard package 1; approximate shipping weight 25 pounds.

Price, No. **6** Control Unit.....**$68.00**

RELAY No. 1550A-DC



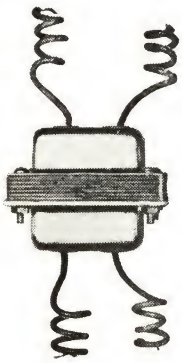
A solenoid-operated, silver-contact switch designed to mount in Touch-Plate gang boxes and to be operated by Model No. 78K1 Transformer and No. 17C Converter. Relay is impulse-type cam action. 10 amps., 125V AC. Controlled by momentary contact switches (Touch-Plate's Model 1400).

Important: The relay is the actual switch — and controls fixtures the same as any conventional switch. Carton 10, standard package, 50.

Price, No. **1550A** Relay.....each **$3.80**

TOUCH-PLATE LOW-VOLTAGE REMOTE CONTROL SWITCH SYSTEM

No. 78K-1 TRANSFORMER



24 volts AC secondary — 115 volts 50-60 cycle primary (ratings 25 VA) — provides 24 volts AC current to the No. 17C converter which converts AC to DC for Touch-Plate switch circuit. Fits K.O. opening in gang boxes or mounting plates available to fit 4-inch square box. Bi-metal thermal cut-out protects transformer and low-voltage circuit by breaking the primary in case of shorts, etc.

Packed one in a carton; standard package, 10. Weight 16 lbs.

Price, No. **78K-1** Transformer .....each **$5.60**

No. 17C CONVERTER

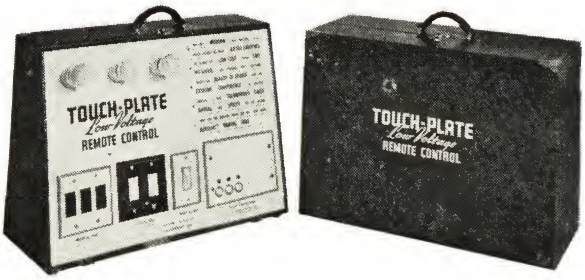


Converts low voltage AC to DC for Touch-Plate switch circuits. Selenium Rectifier 250 MFD Condenser built-in provides surge if voltage fluctuates.

No. 17C Converter to be used only with No. 78K1 transformer. One in a carton; standard package, 10; weight 5 lbs.

Price, No. **17-C** Converter.....each **$5.80**

TOUCH-PLATE DISPLAY
In Carrying Case



Use This Display to Up-Sell Wiring Job

This display board is a very effective sales tool — it will create interest and desire wherever it is shown. It effectively demonstrates entire system including Master Panel. With this display and a little imagination on your part in presenting the sales story, prospects will want to buy this electrical work from you.

Demonstrations Make Sales

Don't fail to have a board with you at all times. Let your customer see this amazingly low-voltage system in actual operation. Increase profits with satisfied customers.

Shipping weight, 29 pounds.

Price, Model MP Touch-Plate Display.....**$70.00**

SPARE PARTS LIST

Cat. No.	Description	Price Each
1078	4-in. Sq. Transformer Steel Mounting Plate	**$0.20**
1401	Single Plate	**.30**
1402	2-Gang Plate	**.50**
1403	3-Gang Plate	**.80**
1410	Touch Button	**.20**
1414	Switch-Back Assembly	**.50**

RODALE WIRING DEVICES



BAKELITE TWIN SOCKET

Medium base — 660 watts, 250 volts. Carton, 10; standard package, 250. Weight, 29 lbs. Underwriters' Listed.

Price, No. **600**.....each **$0.21**

BAKELITE CURRENT TAP

With Two Side Outlets



Medium base — 660 watts, 250 volts. Carton, 25; standard package, 250. Weight, 35 lbs. Underwriters' Listed.

Price, No. **790** .....each **$0.21**



BAKELITE CURRENT TAP

With Pull Chain

Has two side outlets. Medium base; 660 watts, 250 volts. Carton, 25; standard package, 250. Weight, 36 lbs. Underwriters' Listed.

Price, No. **795** .....each **$0.40**

BAKELITE PIN TYPE SOCKET ADAPTER



Medium base — 660 watts, 250 volts. Carton, 20; standard package, 200. Weight, 15 lbs. Underwriters' Listed.

Price, No. **T-84**.....each **$0.16**



BAKELITE TRIO-TAP

15 Amp., 125 Volts
10 Amp., 250 Volts

Carton, 25; standard package, 250. Weight, 20 lbs. Underwriters' Listed.

Each

Price, No. **582** Brown.....**$0.15**
Price, No. **582V** Ivory..... **.19**

BAKELITE SERVICE BLOCK

With Three Outlets
15 Amp., 125 Volts
10 Amp., 250 Volts



Carton, 25; standard package, 250. Weight, 21 lbs. Underwriters' Listed.

Price, No. **581** Brown....each **$0.15**
Price, No. **581V** Ivory....each **.19**

BAKELITE TRIPLE TAPS



Complete with wood screw. Carton, 10; standard package, 250. Weight, 35 lbs.

Each

Price, No. **603** Brown..**$0.20**
Price, No. **603V** Ivory.. **.26**

APPROVED TRIPLE TAPS

Same as No. 603 less wood screw. For table top use. Underwriters' Listed.

Price, No. **602** Brown.....each **$0.20**
Price, No. **602V** Ivory.....each **.26**

RODALE WIRING DEVICES



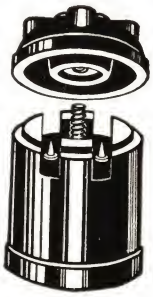
RUBBER WEATHER-PROOF PIGTAIL SOCKET

Medium base. 660 watts, 250 volts. 6 inch No. 14 R.C. wire leads, stripped. Carton, 25; standard package, 250. Weight, 40 lbs. Underwriters' Listed.

Price, No. **132**....each **$0.25**

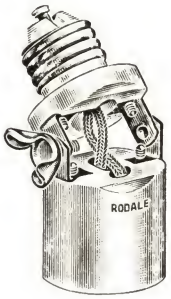
No. **330**—Same as above in bakelite. Price—each **.20**

RUBBER PIN TYPE WEATHERPROOF SOCKET



Medium base—660 watts, 250 volts. Carton, 20; standard package, 200. Weight, 32 lbs.

Price, No. **232**.....each **$0.36**



PORCELAIN SWIVEL SOCKET

Medium base. Flexible socket with angle adjustment for use with all reflector and projector lamps. Carton, 25; standard package, 100. Weight, 30 lbs. Underwriters' Listed.

Price, No. **P-32**.....each **$0.80**

BAKELITE ATTACHMENT PLUG BASE



660 watts, 250 volts. Carton, 50; standard package, 1000. Weight, 43 lbs. Underwriters' Listed.

Price, No. **P-27**.....each **$0.08**



TRIPLE SURFACE CONVENIENCE OUTLETS

With screw terminals. Carton, 25; standard package, 500. Weight, 41 lbs.

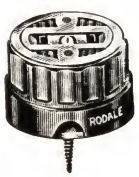
Price, No. **T-93**
Brown .....each **$0.16**
Price, No. **T-93V**
Ivory .....each **.22**

DOUBLE SURFACE OUTLETS

Carton, 20; standard package, 200. Weight, 12 lbs.

Price, No. **T-90** Brown.....each **$0.15**
Price, No. **T-90V** Ivory.....each **.18**

SINGLE SURFACE CONVENIENCE OUTLETS



Complete with wood screw. Carton, 20; standard package, 200. Weight, 10 lbs.

Price, No. **66** Brown..each **$0.10**
Price, No. **66V** Ivory..each **.12**

RODALE WIRING DEVICES



BAKELITE FLUSH TOGGLE SWITCHES

10 Amp., 125 Volts—5 Amp., 250 Volts

Carton, 10; standard package, 100. Weight, 16 lbs. Underwriters' Listed.

Cat. No.	Description	Price Each
730	Single Pole, Brown	**$0.26**
730V	Single Pole, Ivory	**.31**
731	Three Way, Brown	**.37**
731V	Three Way, Ivory	**.42**

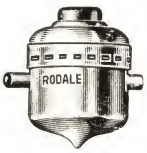
BAKELITE FEED THRU SWITCH

6 Amp., 110 Volt

Carton, 10; standard package, 100. Weight, 7 lbs.

Price, No. **720**.....each **$0.30**





BRASS PENDANT SWITCH

6 Amp., 125 Volts
3 Amp., 250 Volts

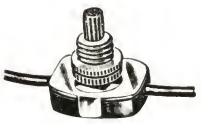
Carton, 25; standard package, 100. Weight, 10 lbs. Underwriters' Listed.

Price, No. **721**.....each **$0.40**

ROTARY BRASS KNOB CANOPY SWITCH

3 Amp., 125 Volts
1 Amp., 250 Volts

Carton, 25; standard package, 250. Weight, 10 lbs. Underwriters' Listed.



Price, No. **722** Single Pole.....each **$0.20**
Price, No. **727** Two-Circuit.....each **.25**



BAKELITE KITCHEN PENDANT SWITCH

With outlet on bottom. Switch operates light. Outlet is always on. Carton, 10; standard package, 100. Weight, 12 lbs.

Price, No. **750**.....each **$0.32**

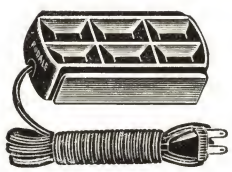
WIRED KITCHEN PENDANT SWITCH

No. 750 switch wired with 4 feet of 3-conductor cord. Carton, 1; standard package, 100. Weight, 24 lbs.

Price, No. **775**.....each **$0.80**



TABLE TAP EXTENSION SET



Bakelite 3-way tap wired with No. 18 P.O. S.J. cord. Flat rubber cap. Standard package, 100. Weight, 30 lbs. Underwriters' Listed.

Cat. No.	Description	Std. Pkg.	Pkg. Wt.	Price Each
609-6	6 foot length	100	30	**$0.63**
609-9	9 foot length	100	37	**.73**
609-12	12 foot length	100	59	**.83**

RODALE WIRING DEVICES



BAKELITE DUPLEX FLUSH RECEPTACLE

15 Amp., 125 Volts
10 Amp., 250 Volts

Carton, 10; standard package, 100. Weight, 13 lbs. Underwriters' Listed.

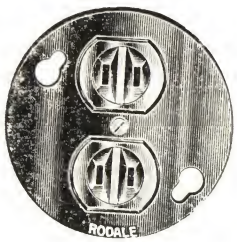
Price, No. **625** Brown.....each **$0.17**
Price, No. **625-V** Ivory.....each **.22**

DUPLEX FLUSH RECEPTACLE ON METAL COVER

15 Amp., 125 Volts
10 Amp., 250 Volts

Carton, 10; standard package, 100. Underwriters' Listed.

Cat. No.	Box Cover	Wt. Lbs.	Price Each
626-3	3-inch	22	**$0.26**
626-4	4-inch	32	**.28**



BAKELITE CEILING RECEPTACLE



660 Watts, 250 Volts

Medium base. Combination 3¼ and 4-inch, with shadeholder groove. Carton, 10; standard package, 100. Weight, 20 lbs. Underwriters' Listed. One to a box.

Price, No. **133** Brown.....each **$0.34**
Price, No. **133V** Ivory.....each **.40**

BAKELITE PILOT LIGHT RECEPTACLE

75 Watts, 125 Volts

Candelabra base. Fits standard outlet boxes. Carton, 10; standard package, 100. Weight, 16 lbs. Underwriters' Listed.

Price, No. **130**.....each **$0.30**



PLASTIC BUSHINGS

With Lockwasher



Carton, 50; standard package, 1000. Weight, 12 lbs.

Price, No. **320**—½ inch I.D. **$0.05**
Price, No. **319**—⅜ inch I.D. ..... **.05**

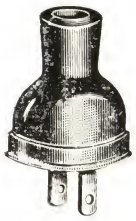
RUBBER BUSHINGS

Unbreakable, soft rubber bushing fits snugly into knockout. Carton, 50; standard package, 1000. Weight, 15 lbs.



Price, No. **321**—½ in. I.D.....**$0.06**
Price, No. **322**—⅜ in. I.D..... **.06**

RODALE WIRING DEVICES



STANDARD RUBBER HANDLE CAPS

15 Amp., 125 Volts
10 Amp., 250 Volts

Cord hole, 5/16-inch diameter. Carton, 25; standard package, 500. Weight, 35 lbs. Underwriters' Listed.

Price, No. **502**.....each **$0.14**

SMALL RUBBER HANDLE CAPS

Cord hole, 5/16 inch diameter. With steel blades. Carton, 250; standard package, 1000. Weight, 62 lbs.

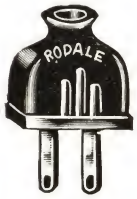
Price, No. **394**.....each **$0.08**

FLAT RUBBER GRIP CAPS

15 Amp., 125 Volts
10 Amp., 250 Volts

Cord hole, 5/16 inch diameter. Carton, 25; standard package, 500. Weight, 27 lbs. Underwriters' Listed.

Price, No. **506**.....each **$0.14**



BAKELITE ATTACHMENT PLUG CAPS



Cord hole, 5/16 inch diameter. Carton, 50; standard package, 1000. Weight, 38 lbs.

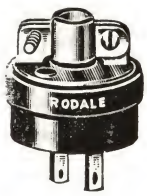
Cat. No.	Description	Price Each
501	Brown, w/ brass blades	**$0.08**
501V	Ivory, w/ brass blades	**.10**
16	Brown, w/ steel blades	**.06**

RUBBER INDUSTRIAL CAPS

15 Amp., 125 Volts
10 Amp., 250 Volts

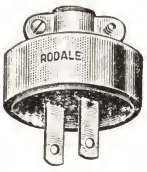
With metal cord clamp. Cord hole ½inch. Carton, 25; standard package, 100. Weight, 13 lbs. Underwriters' Listed.

Price, No. **524**.....each **$0.34**



PARALLEL BLADE

10 Amps., 250 Volts—15 Amps., 125 Volts



Armored Bakelite

Dimensions: O.D., 1½ inches. Cord hole, .156–.500.

Cat. No.	Carton	Std. Pkg.	Wt. Lbs. Std.Pkg.	Price Each
1120	10	100	12	**$0.42**
With "Spring-Tyte" Blades				
1121	10	100	12	**.44**

RODALE WIRING DEVICES



RUBBER FEMALE CORD CONNECTOR

15 Amp., 125 Volts
10 Amp., 250 Volts

With metal cord clamp. Use with No. 524 cap to make complete two piece cord connector. Cord hole, ½ inch. Carton, 10; standard package, 100. Weight, 16 lbs. Underwriters' Listed.

Price, No. **523**.....each **$0.76**

BAKELITE EXTENSION SOCKETS



Cat. No.	Overall Lgth., In.	Carton	Std. Pkg.	Wt. Lbs.	Price Each
	Medium to Medium				
P31	2 5/16	20	260	25	**$0.20**
	Medium to Mogul				
X10	.....	10	100	12	**.60**
	Mogul to Mogul				
X19	4	10	50	12	**.90**

RUBBER CORD CONNECTORS



15 Amp., 125 Volts
10 Amp., 250 Volts

Soft rubber body and cap. Carton, 20; standard package, 100. Weight, 15 lbs. Underwriters' Listed.

Cat. No.	Description	Price Each
T61	Two Piece Complete	**$0.48**
T62	Female Connector Half	**.40**

BAKELITE CORD CONNECTORS

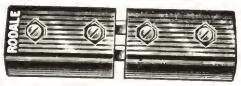
15 Amp., 125 Volts
10 Amp., 250 Volts

Carton, 25; standard package, 250. Weight, 33 lbs. Underwriters' Listed.

Cat. No.	Description	Price Each
178	Two Piece Complete	**$0.26**
179	Female Connector Half	**.20**



FLAT BAKELITE CORD CONNECTOR



660 Watts, 250 Volts

Size: 3 inches by 7/8 inches by 5/16 inches. Carton, 20; standard package, 100. Weight, 9 lbs. Underwriters' Listed.

Price, No. **T-72**.....each **$0.32**

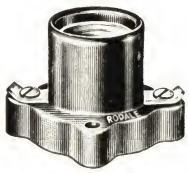
RODALE WIRING DEVICES

BAKELITE SOCKET REDUCERS
Underwriters' Listed



Cat. No.	Carton	Std. Pkg.	Wt. Lbs.	Price Each
Mogul to Medium—660 W., 250 V.				
X12	25	100	16	**$0.26**
Medium to Candelabra—75 W., 125 V.				
X13	50	250	10	**.12**
Medium to Intermediate—75 W., 125 V.				
X14	50	250	10	**.16**

BAKELITE CLEAT RECEPTACLES



Cat. No.	Carton	Std. Pkg.	Wt. Lbs.	Price Each
Miniature Base—75 W., 250 V.				
136	20	200	7	**$0.13**
Candelabra Base—75 W., 250 V.				
137	20	200	7	**.13**
Medium Base—660 W., 250 V.				
138	10	200	15	**.20**
Intermediate Base—660 W., 250 V.				
143	20	200	15	**.18**



BAKELITE SWITCH PLUG

6 Amp., 125 Volts
3 Amp., 250 Volts

Carton, 10; standard package, 100. Weight, 16 lbs.

Price, No. **800**.....each **$0.36**

CUTLER HAMMER IRON PLUG

10 Amp., 125 Volts
5 Amp., 250 Volts



Carton, 10; standard package, 100. Weight, 14 lbs. Underwriters' Listed.

Price, No. **700**.....each **$0.20**



BAKELITE IRON PLUG

10 Amp., 125 Volts
5 Amp., 250 Volts

Carton, 10; standard package, 100. Weight, 9 lbs. Underwriters' Listed.

Price, No. **707**.....each **$0.13**

BAKELITE 3-LB. MIDGET PLUG

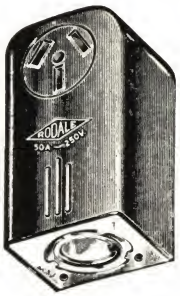


Carton, 10; standard package, 100. Weight, 9 lbs. Underwriters' Listed.

Price, No. **450**.....each **$0.12**

RODALE CORD SETS AND ACCESSORIES

SURFACE RANGE RECEPTACLE



3 Wire Polarized

Double Knockouts for easier installation and patented cord clamp. Underwriters' Listed.

Cat. No.	Rating Amp.	Rating Volts	Std. Pkg.	Wt. Lbs. Std.Pkg.	Price Each
548	50	250	100	130	**$2.00**

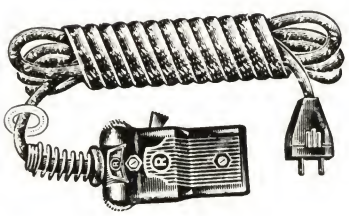
THREE WIRE—ALL RUBBER ELECTRIC RANGE CORD SETS

Length overall 36 inches. Metal clamp strain relief. One to box. Standard package, 10; weight, 20 lbs. Underwriters' Listed.



Cat. No.	Description	Price Each
545	Two No. 8 and one No. 10. Rated 35 amp., 250 volts	**$3.20**
546	Two No. 6 and one No. 8. Rated 50 amp., 250 volts	**3.40**
547	Three No. 6 wires. Rated 50 amp., 250 volts	**4.00**

SWITCH PLUG CORD SET



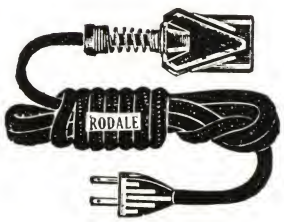
Wired with 7 ft. No. 18 3M cycle cord. Flat rubber cap. Standard package, 100. Wt., 34 lbs.

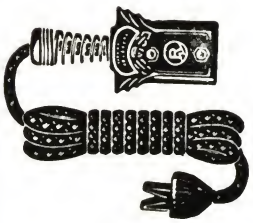
Price, No. **848** ea. **$1.16**

CUTLER HAMMER PLUG CORD SET

Wired with 7 feet No. 18 3M cycle cord. Flat rubber cap. Standard package, 100. Weight, 37 lbs.

Price, No. **715** each **$0.92**





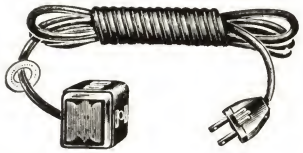
BAKELITE CORD SET

Wired with 6 feet unapproved cord. Flat rubber cap. Standard package, 100. Weight, 31 lbs.

Price, No. **645** each **$0.72**

RODALE CORD SETS

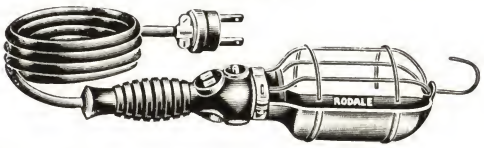
TRIO-TAP EXTENSION SET



Bakelite 3-way tap. Wired with No. 18 P.O.T. cord. Flat rubber cap. Standard package, 100. Underwriters' Listed.

Cat. No.	Description	Wt. Lbs.	Price Each
509	6 foot length	24	$0.50
	9 foot length	32	.62
	12 foot length	38	.74
	15 foot length	49	.86

RODALE HEAVY DUTY TROUBLE LAMPS



Heavy reflector guard, protected push switch. Convenience outlets, built in handle. Wired with high grade rubber service cord and metal cord grip. Rubber industrial cap. Standard package, 30.

Cat. No.	Description	Price Each 25 Ft.	Price Each 50 Ft.
370	With one outlet and switch	$2.90	$4.40
239	With switch	2.80	4.30
238	Keyless	2.70	4.20

RODALE SOCKETS

SOFT RUBBER SOCKET

250 Watts, 250 Volts

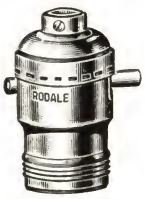


Medium base, pendant cap. Weight, 25 lbs.

Cat. No.	Type	Carton	Std. Pkg.	Price Each
160	Key	20	100	$0.60
161	Push	20	100	.60
162	Pull Chain	20	100	.70
163	Keyless	20	100	.50

BRASS SOCKETS

250 Watts, 250 Volts



Medium base. ⅛ inch cap. Carton, 250. Underwriters' inspected.

Cat. No.	Type	Wt. Lbs.	Price Each
	Standard		
164	Pull Chain	45	$0.60
	Electrolier		
165	Turn Knob	40	.48
166	Push Thru	40	.46

RODALE LAMP FLASHERS



Button Type—60 Watt Capacity

10 on display card. Standard package, 10 cards.
Price, No. **410**.....each **$0.40**

Socket Type—100 Watt Capacity

Carton, 25; standard package, 250. Weight, 18 lbs.
Price, No. **411**.....each **$0.44**

Pin Type—100 Watt Capacity

Carton, 20; standard package, 200. Weight, 15 lbs.
Price, No. **412**.....each **$0.40**

RODALE HEAVY DUTY RUBBER INDUSTRIAL PLUGS



FEMALE CORD CONNECTORS

For 3 Pole Blades

Cord hole, 7/16 inch. 10 amp., 250 volts; 15 amp., 125 volts. Carton, 10; standard package, 100. Underwriters' Listed.

Cat. No.	Description	Wt. Lbs.	Price Each
568	With cord clamp	15	$1.16
567	Without clamp	14	.84

FEMALE CORD CONNECTORS

For "T" Polarity Blades



Cord hole, 7/16 inches. 10 amp., 250 volts; 15 amp., 125 volts. Carton, 10; standard package, 100. Underwriters' Listed.

Cat. No.	Description	Wt. Lbs.	Price Each
566	With cord clamp	13	$1.06
565	Without clamp	11	.74



FEMALE CORD CONNECTORS

For Parallel Blades

Cord hole, 7/16 inches. 10 amp., 250 volts; 15 amp., 125 volts. Carton, 10; standard package, 100. Underwriters' Listed.

Cat. No.	Description	Wt. Lbs.	Price Each
562	With cord clamp	13	$0.96
561	Without clamp	11	.64

MALE HANDLE CAPS

With Three Pole Blades



Cord hole 7/16 inches. 10 amp., 250 volts; 15 amp., 125 volts. Carton, 10; standard package, 100. Underwriters' Listed.

Cat. No.	Description	Wt. Lbs.	Price Each
558	With cord clamp	14	$0.96
557	Without clamp	12	.64



MALE HANDLE CAPS

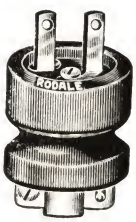
With "T" Polarity Blades

Cord hole, 7/16 inches. 10 amp., 250 volts; 15 amp., 125 volts. Carton, 10; standard package, 100. Underwriters' Listed.

Cat. No.	Description	Wt. Lbs.	Price Each
556	With cord clamp	12	$0.86
555	Without clamp	10	.54

MALE HANDLE CAPS

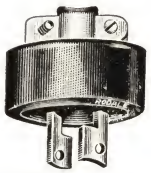
With Parallel Blades



Cord hole, 7/16 inches. 10 amp., 250 volts; 15 amp., 125 volts. Carton, 10; standard package, 100. Underwriters' Listed.

Cat. No.	Description	Wt. Lbs.	Price Each
552	With cord clamp	12	$0.76
551	Without clamp	10	.44

RODALE TURN-TYTE INTERLOCKING DEVICES



10 AMP.—2 WIRE RUBBER ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

10 Amp.—250 Volts
15 Amp.—125 Volts

Dim.: O.D. 1½ inches. Cord hole diameter .156 to .625.

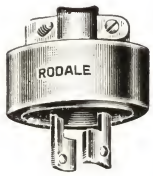
Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1029	Non-Polarized	10	50	7	**$50.00**
1029P	Polarized	10	50	7	**50.00**

10 AMP.—2 WIRE ARMORED ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

10 Amp.—250 Volts
15 Amp.—125 Volts



Dim.: O.D. 1½ inches. Cord hole diameter .156 to .625.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1026	Armored	10	50	6	**$50.00**
1026P	Armored, Polarized	10	50	6	**50.00**



10 AMP.—2 WIRE ARMORED BAKELITE CONNECTOR BODY

With Metal Cord Clamp

Underwriters' Listed

10 Amp.—250 Volts
15 Amp.—125 Volts

Dim.: O.D. 1½ inches. Cord hole diameter .156 to .500.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
2100	Bakelite	10	50	9	**$70.00**

10 AMP.—2 WIRE SINGLE RECEPTACLE

Bakelite

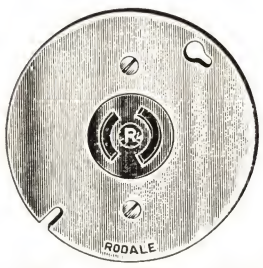
Underwriters' Listed

10 Amp.—250 Volts
15 Amp.—125 Volts



Will accommodate Polarized and Non-Polarized caps, and standard single outlet plates.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1020	Single Receptacle	10	50	9	**$60.00**



10 AMP.—2 WIRE SINGLE RECEPTACLE ON COVER

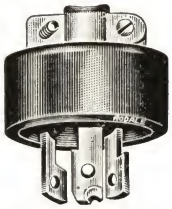
10 Amp.—250 Volts
15 Amp.—125 Volts

Will accommodate Polarized and Non-Polarized caps.

Heavy gauge metal cover coated to resist corrosion.

Cat. No.	Cover Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1021-3	3¼	10	50	16	**$72.00**
1021-4	4	10	50	21	**78.00**

RODALE TURN-TYTE INTERLOCKING DEVICES



10 AMP.—3 WIRE RUBBER ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

10 Amp.—250 Volts
15 Amp.—125 Volts

Dim.: O.D. 1½ inches. Cord hole diameter .156 to .625.

Cat. No.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1039	10	50	8	**$80.00**

10 AMP.—3 WIRE ARMORED ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

10 Amp.—250 Volts
15 Amp.—125 Volts



Dim.: O.D. 1½ inches. Cord hole diameter .156 to .625.

Cat. No.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1036	10	50	7	**$80.00**



10 AMP.—3 WIRE ARMORED BAKELITE CONNECTOR BODY

With Metal Cord Clamp

Underwriters' Listed

10 Amp.—250 Volts
15 Amp.—125 Volts

Dim.: O.D. 1½ inches. Cord hole diameter .156 to .500.

Cat. No.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
3100	10	50	9	**$140.00**

10 AMP.—3 WIRE SINGLE RECEPTACLE

Bakelite

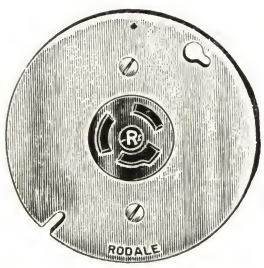
Underwriters' Listed

10 Amp.—250 Volts
15 Amp.—125 Volts



Will accommodate standard single outlet plates.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1075	.....	10	50	10	**$140.00**
1075G	Grounded	10	50	10	**140.00**



10 AMP.—3 WIRE POLARIZED

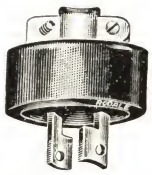
Single Receptacle on Cover

10 Amp.—250 Volts
15 Amp.—125 Volts

Heavy gauge metal cover coated to resist corrosion.

Cat. No.	Cover Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1076-3	3¼	10	50	17	**$154.00**
1076-4	4	10	50	22	**162.00**

RODALE TURN-TYTE INTERLOCKING DEVICES



20 AMP.—2 WIRE RUBBER ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

20 Amp.—250 Volts

Dim.: O.D. 1½ inches. Cord hole diameter .156 to .625.

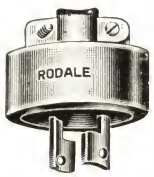
Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1229	Non-Polarized	10	50	8	**$56.00**
1229P	Polarized	10	50	8	**56.00**

20 AMP.—2 WIRE ARMORED ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

20 Amp.—250 Volts



Dim.: O.D. 1¾ inches. Cord hole diameter .156 to .625.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1226	Non-Polarized	10	50	9	**$56.00**
1226P	Polarized	10	50	9	**56.00**



20 AMP.—2 WIRE ARMORED BAKELITE CONNECTOR BODY

With Metal Cable Clamp

Underwriters' Listed

20 Amp.—250 Volts

Dim.: O.D. 1¾ inches. Cord hole diameter .156 to .625.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
2200	Armored	10	50	12	**$95.00**

20 AMP.—2 WIRE SINGLE RECEPTACLE

Bakelite

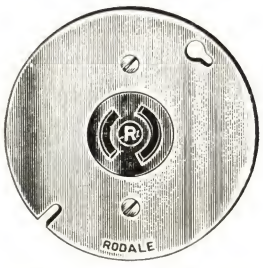
Underwriters' Listed

20 Amp.—250 Volts



Will accommodate Polarized and Non-Polarized caps, and standard single outlet plates.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1220	Single Receptacle	10	50	9	**$68.00**



20 AMP.—2 WIRE SINGLE RECEPTACLE ON COVER

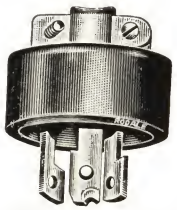
20 Amp.—250 Volts

Will accommodate Polarized and Non-Polarized caps.

Heavy gauge metal cover coated to resist corrosion.

Cat. No.	Cover Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1221-3	3¼	10	50	16	**$78.00**
1221-4	4	10	50	13	**82.00**

RODALE TURN-TYTE INTERLOCKING DEVICES



20 AMP.—3 WIRE RUBBER ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

20 Amp.—250 Volts
10 Amp.—575 Volts

Dim.: O.D. 1¾ inches. Cord hole diameter .156 to .625.

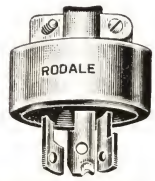
Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1239	Rubber	10	50	10	**$120.00**

20 AMP.—3 WIRE ARMORED ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

20 Amp.—250 Volts
10 Amp.—575 Volts



Dim.: O.D. 1¾ inches. Cord hole diameter .156 to .625.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1236	Armored	10	50	9	**$120.00**



20 AMP.—3 WIRE ARMORED BAKELITE CONNECTOR BODY

With Metal Cord Clamp

Underwriters' Listed

20 Amp.—250 Volts
10 Amp.—575 Volts

Dim.: O.D. 1¾ inches. Cord hole diameter .156 to .625.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
3200	Armored	10	50	13	**$200.00**

20 AMP.—3 WIRE SINGLE RECEPTACLE

Bakelite

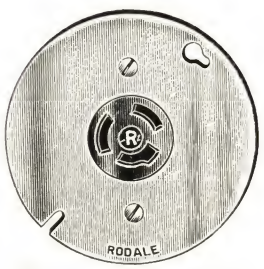
Underwriters' Listed

20 Amp.—250 Volts
10 Amp.—575 Volts



Will accommodate standard single outlet plates.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1275G	Grounded	10	50	13	**$160.00**
1275	Ungrounded	10	50	13	**160.00**



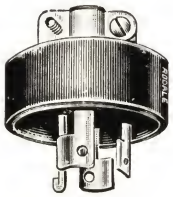
20 AMP.—3 WIRE POLARIZED SINGLE RECEPTACLE ON COVER

20 Amp.—250 Volts
10 Amp.—575 Volts

Heavy gauge metal cover coated to resist corrosion.

Cat. No.	Cover Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1276-3	3¼	10	50	20	**$170.00**
1276-4	4	10	50	25	**180.00**

RODALE TURN-TYTE INTERLOCKING DEVICES



20 AMP.—4 WIRE RUBBER ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

20 Amp.—250 Volts
10 Amp.—575 Volts

Dim.: O.D. 2¼ inches. Cord hole diameter .312 to .750.

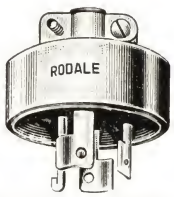
Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
2439	Rubber	10	50	22	**$170.00**

20 AMP.—4 WIRE ARMORED ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

20 Amp.—250 Volts
10 Amp.—575 Volts



Dim.: O.D. 2¼ inches. Cord hole diameter .312 to .750.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
2436	Armored	10	50	20	**$170.00**



20 AMP.—4 WIRE ARMORED BAKELITE CONNECTOR BODY

With Metal Cord Clamp

Underwriters' Listed

20 Amp.—250 Volts
10 Amp.—575 Volts

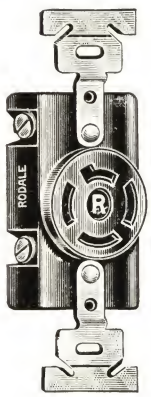
Dim.: O.D. 2¼ inches. Cord hole diameter .312 to .750.

Cat. No.	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
2400	10	50	28	**$250.00**

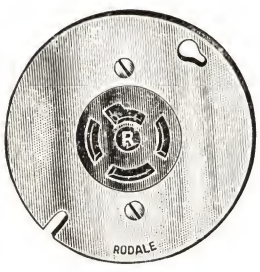
20 AMP.—4 WIRE SINGLE RECEPTACLE

Underwriters' Listed

20 Amp.—250 Volts
10 Amp.—575 Volts



Cat. No.	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
2475	10	50	18	**$NA**
	Grounded			
2475G	10	50	18	**NA**



20 AMP.—4 WIRE SINGLE RECEPTACLE ON 4-INCH COVER METAL

Underwriters' Listed

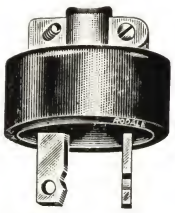
20 Amp.—250 Volts
10 Amp.—575 Volts

Heavy gauge metal cover.

Cat. No.	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
2475	10	50	35	**$NA**
	Grounded			
2475G	10	50	35	**NA**

NA—Indicates item not available.

RODALE "T" POLARITY H.D. WIRING DEVICES



20 AMP.—2 WIRE "T" POLARITY RUBBER ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

20 Amp.—250 Volts

Dim.: O.D. 1¾ inches. Cord hole diameter .156 to .625.

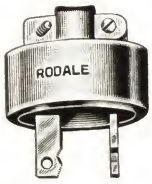
Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1204	Rubber	10	50	8	**$88.00**

20 AMP.—2 WIRE "T" POLARITY ARMORED ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

20 Amp.—250 Volts



Dim.: O.D. 1¾ inches. Cord hole diameter .156 to .625.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1202	Armored	10	50	9	**$88.00**



20 AMP.—2 WIRE "T" POLARITY ARMORED BAKELITE CONNECTOR BODY

With Metal Cord Clamp

Underwriters' Listed

20 Amp.—250 Volts

Dim.: O.D. 1¾ inches. Cord hole diameter .156 to .625.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
2220	Armored	10	50	12	**$120.00**

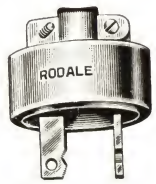
20 AMP.—2 WIRE "T" POLARITY FLUSH RECEPTACLE

Underwriters' Listed
20 Amp.—250 Volts



Will accommodate standard single outlet plates.

Cat. No.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1240	10	50	9	**$116.00**



"T" POLARITY ARMORED ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

10 Amp.—250 Volts
15 Amp.—125 Volts

Dim.: O.D. 1½ inches. Cord hole diameter .156 to .500.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1140	Armored	10	100	12	**$74.00**

DOUBLE T SLOT CONNECTOR BODY

With Armored Base and Metal Cord Clamp—Bakelite

Underwriters' Listed

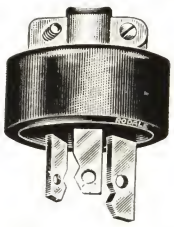
10A—250V 15A—125V



Dim.: O.D. 1½ inches. Cord hole diameter .156 to .500.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
2120	Armored	10	100	18	**$70.00**

RODALE HEAVY DUTY 3-WIRE WIRING DEVICES



10 AMP.—3 WIRE RUBBER ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

10 Amp.—250 Volts

15 Amp.—125 Volts

Dim.: O.D. 1½ inches. Cord hole diameter .156 to .437.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1301	Polarized	10	100	15	$62.00

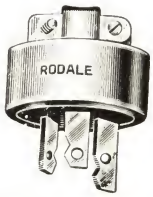
10 AMP.—3 WIRE ARMORED ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

10 Amp.—250 Volts

15 Amp.—125 Volts



Dim.: O.D. 1½ inches. Cord hole diameter .156 to .500.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1130	Armored, Polarized	10	100	12	$62.00

10 AMP.—2 AND 3 WIRE DUAL-PURPOSE CONNECTOR BODY

With Armored Base
With Metal Cord Clamp

Underwriters' Listed

10 Amp.—250 Volts

15 Amp.—125 Volts



Dim.: O.D. 1½ inches. Cord hole dia. .156 to .500. Will accommodate parallel and 3-wire caps.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
3130	Armored Base, Polarized	10	100	18	$100.00

10 AMP.—2 AND 3 WIRE POLARIZED DUAL-PURPOSE SINGLE FLUSH RECEPTACLE

Underwriters' Listed

10 Amp.—250 Volts

15 Amp.—125 Volts



Will accommodate Parallel and three wire caps. Fits all standard single outlet plates.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1030	Polarized	10	100	18	$126.00
1030G	Grounded, Polarized	10	100	18	126.00



10 AMP.—3 WIRE POLARIZED DUAL-PURPOSE SINGLE RECEPTACLE ON COVER

Underwriters' Listed

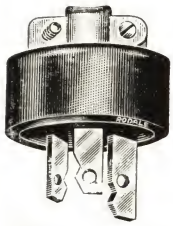
10 Amp.—250 Volts

15 Amp.—125 Volts

Will accommodate Parallel and 3-wire caps. Heavy gauge metal cover.

Cat. No.	Cover Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1031-3	3¼	10	50	17	$136.00
1031-4	4	10	50	22	138.00
	Grounded				
1031-3G	3¼	10	50	17	136.00
1031-4G	4	10	50	22	138.00

RODALE HEAVY DUTY 3-WIRE WIRING DEVICES



20 AMP.—3 WIRE POLARIZED RUBBER ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

20 Amp.—250 Volts

Dim.: O.D. 1⅞ inches. Cord hole diameter .156 to .625.

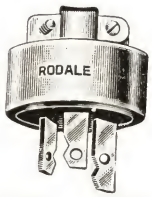
Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
2301	Polarized	10	50	10	$110.00

20 AMP.—3 WIRE POLARIZED ARMORED ATTACHMENT CAP

With Metal Cord Clamp

Underwriters' Listed

20 Amp.—250 Volts



Dim.: O.D. 1¾ inches. Cord hole diameter .156 to .625.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1201	Armored, Polarized	10	50	9	$110.00

20 AMP.—3 WIRE POLARIZED ARMORED BAKELITE CONNECTOR BODY

With Metal Cord Clamp

Underwriters' Listed

20 Amp.—250 Volts



Dim.: O.D. 1¾ inches. Cord hole diameter .156 to .625.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
3230	Armored, Polarized	10	50	9	$170.00

20 AMP.—3 WIRE POLARIZED SINGLE RECEPTACLE

Bakelite

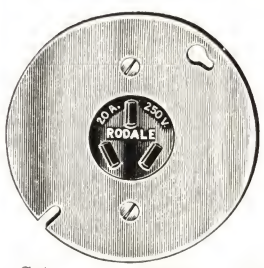
Underwriters' Listed

20 Amp.—250 Volts



Fits all standard single outlet plates.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1230	Bakelite	10	50	10	$140.00
1230G	Grounded	10	50	10	140.00



20 AMP.—3 WIRE POLARIZED SINGLE RECEPTACLE ON COVER

Underwriters' Listed

20 Amp.—250 Volts

Heavy gauge metal cover.

Cat. No.	Cover Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
1231-3	3¼	10	50	17	$150.00
1231-4	4	10	50	22	160.00
	Grounded				
1231-3G	3¼	10	50	17	150.00
1231-4G	4	10	50	22	160.00

RODALE COILED RESISTANCE WIRES



For repair work. Full instructions on spool. Standard package, 10 spools; average weight, 5 lbs. 10 feet of coiled wire on spool.

Cat. No.	Diameter Inches	Price Per Spool
E78-1	9/64	$2.50
E78-2	5/32	2.50
E78-3	7/32	4.00
E78-4	1/4	6.00
E78-5	1/4 Nick. V.	8.50

RODALE HEATING ELEMENTS

CONE HEATER ELEMENTS

Edison base. One to box. Carton, 25; standard package, 100. Weight, 24 lbs.



Cat. No.	Volts	Watts	Price Each
E77	110	600	$0.64
E77S	110	1000	.94
E77X	220	600	1.04



STRAIGHT HEATER ELEMENT

Edison base. 25 to carton; standard package, 100. Weight, 27 lbs.

Price, No. E74, 110 Volts, 600 Watts....each $0.64

HORIZONTAL HEATER ELEMENT

With adjustable terminal straps. Carton, 25; standard package, 100. Weight, 9 lbs. 110 volts, 600 watts.



Price, No. E75.....$0.74



MASTER CONE ELEMENT

Edison base — extra large. 4½ inches long. Carton, 1; standard package, 25. Weight, 27 lbs. 110 volts, 1000 watts.
Price, No. E70.....each $1.30

McGILL LEVOLIER SWITCHES

Approved by Underwriters' Laboratories, Inc.

PULL CHAIN—SINGLE CIRCUIT

3 Amp. "T," 125 Volt—1 Amp., 250 Volt

Especially durable, yet inexpensive 3 Amp., 250 Volt switch with single pole, double break mechanism, enclosed in plastic case. 6 in. wire leads secured to terminals by pressure connections — no soldered terminals. Equipped with 6 ft. cord and bell. Size 1 x 1¼ inches.



No. 21

Cat. No.	Stem, Inches—Diam.	Stem, Inches—Length	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
21	13/32	5/16	10	100	7	$72.00

McGILL LEVOLIER SWITCHES

Approved by Underwriters' Laboratories, Inc.

LEVER OPERATED—SINGLE CIRCUIT

6 Amp. "T," 125 Volt—3 Amp., 250 Volt



No. 71

The No. 71 is the thinnest 6 Amp., 250 Volt "T" rated switch made — only 15/32 inch thick. Plastic cased with 6-inch wire leads, it is built with the famous Levolier mechanism for dependability and long life. Size 15/32 x 1 9/32 inches.

Ideal for small, and especially thin sectional fixture canopies.

Cat. No.	Stem, Inches—Diam.	Stem, Inches—Length	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
71	15/32	9/32	10	100	8	$96.00

SINGLE CIRCUIT—TWO CIRCUIT—THREE WAY

6 Amp., 125 Volt—3 Amp., 250 Volt

Practical but small plastic cased toggle switches with wire leads or soldering lugs. Dust and vibration proof with single pole, double break mechanism. No. 25 is single circuit for individual control of lights in such applications as Pullman cars, busses, trailers, lamps, appliances, small tools, fractional horse power motors, etc. "T" rated. Size ½ x ½ x 1 inch.



No. 25

No. 27 is three way for control of one or more lights from two points. No. 28 for controlling either of two circuits. No off position.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
25	Single Circuit, Wire Leads	10	100	5	$72.00
25-L	Single Circuit, with sold. Lugs	10	100	4	72.00
27	Three-Way, Wire Leads	10	100	5	92.00
27-L	Three Way, w/sold. Lugs	10	100	4	80.00
28	Two Circuit, Wire Leads	10	100	5	92.00
28-L	Two Circuit, w/sold. Lugs	10	100	4	80.00

All stem diameters 15/32", length ¼".



No. 121

LEVOLIER FIXTURE SOCKETS

Approved by Underwriters' Laboratories, Inc.

660 Watts, 250 Volts

For brackets and chandeliers using candles, husks, and other types of socket covers. The porcelain lever serves as a finishing knob and does away with unsightly black keys, slots in husks, or chains coming out of the side.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
103	⅜" Nipple, Brass or Nickle Lever	10	100	13	$110.00
119	⅜" Nipple, Plain Lever	10	100	12	110.00
121	⅜" Nipple, Porcelain Lever	10	100	15	122.00
122	⅜" Nipple, Porcelain Lever	10	100	15	115.00
127	Square Shank, Plain Lever	10	100	14	110.00
128	Porcelain Knob, White	10	100	....	12.00

McGILL LEVOLIER SWITCHES

Approved by Underwriters' Laboratories, Inc.

LEVER OPERATED—SINGLE CIRCUIT

6 Amp. "T," 125 Volt—3 Amp., 250 Volt



No. 41

Only ⅝ inch thick the No. 41 is one of the smallest 6 amp. 250 volt pull switches made, yet has unusual capacity, dependability and long life. Single pole, double break mechanism, equipped with 6 ft. cord or plain lever control. Standard finishes: brass, dark bronze, and burnished nickel.

Widely adaptable for canopy or conduit box mounting for individual control of incandescent or fluorescent lighting, F.H.P. motors, etc.

Cat. No.	Stem, In. Diam.	Stem, In. Length	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
41	7/16	3/16	10	100	10	$110.00
41PL	No. 41 with Plain Lever, no chain					104.00
42	7/16	3/8	10	100	11	116.00
43	7/16	3/4	10	100	11	116.00

LEVER OPERATED—SINGLE CIRCUIT

6 Amp. "T," 125 Volt—3 Amp., 250 Volt

Can be used on any chain fixture, old or new, and between any two links of chain. When installed in fixtures that have been previously hung it fits in place of one of the chain links without altering the length of the fixture or necessitating rewiring or splicing of lead wires.



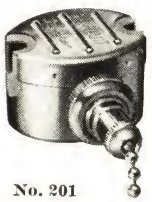
No. 41 Link

The Levolier link switch consists of a standard Levolier pull switch, and Levolier link.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
39	No. 41 with Mounting Link	10	100	13	$110.00

LEVER OPERATED—TWO CIRCUIT

3 Amp., 125 Volt—1 Amp., 250 Volt



No. 201

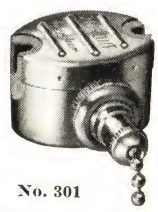
Designed to operate with three-light lamps. When installed in the canopy of a fixture using the three-light lamp, it operates as follows: First pull turns on smaller filament, second pull turns off small filament and turns on the larger filament, third pull turns both filaments on and fourth turns both off. Standard finishes, brass, dark bronze and burnished nickel. Size ⅞ x 1⅜ inches.

Cat. No.	Stem, In. Diam.	Stem, In. Length	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
201	7/16	3/16	10	100	11	$115.00
202	7/16	3/8	10	100	11	120.00
203	7/16	3/4	10	100	12	120.00

LEVER OPERATED—THREE WAY

3 Amp., 125 Volt—1 Amp., 250 Volt

Permits the control of one or more lights from two different points. Also used as reversing switch and for fractional horse power motors. Standard finishes, brass, dark bronze, burnished nickel. Size ⅞x1⅜ inches.



No. 301

Cat. No.	Stem, In. Diam.	Stem, In. Length	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
301	7/16	3/16	10	100	12	$126.00
302	7/16	3/8	10	100	12	132.00
303	7/16	3/4	10	100	13	132.00

McGILL LEVOLIER SWITCHES

Approved by Underwriters' Laboratories, Inc.

LEVER OPERATED—SINGLE CIRCUIT

10 Amp. "T," 125 Volt—5 Amp., 250 Volt



No. 1010

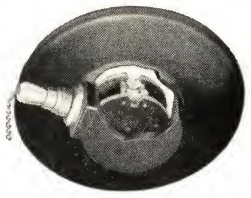
Smallest 10 Amp. pull switch made yet the No. 1010 has the ability to withstand the same loads as switches much larger in size. Single pole double break mechanism with 6 ft. cord and bell. For individual control of high wattage lamps and fluorescent banks up to six 4-tube fixtures.

Standard finishes, brass, dark bronze and burnished nickle.

Cat. No.	Stem, In. Diam.	Stem, In. Length	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
1010	½	3/8	10	100	20	$196.00
1010L	½	5/8	10	100	20	202.00
1010PL	No. 1010 with Plain Lever —No Chain		10	100	20	190.00
1039	With Mounting Link		10	100	26	196.00

SWITCH HOUSING PLASTIC OUTLET BOX COVER

With No. 1010 Switch



No. 109

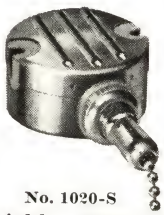
No. 109 outlet box cover provides a cover and switch assembly for ceiling or wall mounted outlet boxes. Provides an inconspicuous, well-designed housing to replace large, unsightly switches. Ideal to provide power-saving individual control of banks of lights up to 1250 watts. Housing is molded brown phenolic plastic with recess to accommodate No. 1010 Levolier switch. Molded with partial holes which can be punched out to fit 3- or 4-inch outlet boxes.

No. 109-X is the same as above but without switch. May be used with other Levolier switches including Nos. 42, 202, 302 and 1020S.

Cat. No.	Description	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
109	With No. 1010 Switch	20	5½	$2.50
109-X	Same, without Switch	20	1	.50

LEVER OPERATED—TWO CIRCUIT

10 Amp. "T," 125 Volt—5 Amp., 250 Volt

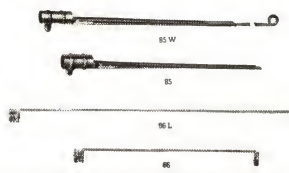


No. 1020-S

Sturdy single pole 10 Amp. switch to control double filament, three light lamps. Also suitable for fluorescent groups where it is desirable to light one or more tubes in individual fixtures. Circuit control sequence: 1, 2, 1 and 2, off. Equipped with 6 ft. cord and bell. Standard finishes, brass, dark bronze, and burnished nickle. Size ⅞ x 1¾ inches.

Cat. No.	Stem, In. Diam.	Stem, In. Length	Carton	Std. Pkg.	Pkg. Wt.	Price Per 100
1020S	7/16	3/8	10	100	13	$207.00
1020L	7/16	3/4	10	100	13	212.00
1020PL	No. 1020S with Plain Lever— No Chain		10	100	13	202.00

McGILL LEVOLIER EXTENSION ARMS



Constant pulling of lamp cords that rub against reflectors, shades, and bowls, causes needless wear, expense, fixture swaying and risk. The arm slips over the Levolier switch lever, cord is inserted through end hole and knotted to hold. No. 85-W can be extended for use with 18–22-in. and larger basin fixtures. Standard or special finished to match all Levolier switches.

Cat. No.	Overall Length Inches	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
85	5¼	10	100	3	**$25.00**
85-W	9	10	100	4	**30.00**
86*	5	10	100	2	**14.00**
86-L*	9	10	100	3	**21.00**

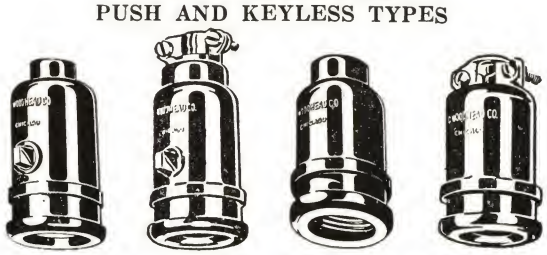
*For No. 71 switch only.

PRoTEX RUBBER-COVERED SOCKETS

Daniel Woodhead Company Products

660 Watts, 250 Volts

PUSH AND KEYLESS TYPES



No. 700 No. 705 No. 710 No. 717

Description	PUSH TYPE Cat. No.	Pkg. Wt.	Price Each	KEYLESS TYPE Cat. No.	Pkg. Wt.	Price Each
Pendant with 7/16" Cord Hole	**700**	27	**$1.60**	**710**	22	**$0.80**
With ⅛-inch Cap	**701**	29	**1.80**	**711**	23	**1.00**
With ¼-inch Cap	**702**	29	**1.80**	**712**	23	**1.00**
With ⅜-inch Cap	**703**	31	**1.90**	**713**	25	**1.20**
With ½-inch Cap	**704**	32	**1.90**	**714**	26	**1.20**
Pendant with ⅛" to ½" Cord Grip	**705**	38	**2.20**	**717**	33	**1.15**

Carton, 10; standard package, 100.

WATERTITE WEATHERPROOF SOCKETS

Daniel Woodhead Company Products

660 Watts, 600 Volts



No. 600 No. 601

Waterproof and non-breakable. May be used under water indefinitely without injury or short-circuit in socket or lamp. Meets all requirements for outside use. Fits standard sign receptacle cover.

Standard weatherproof shade holder or lamp guard will fit Watertite socket.

Cat. No.	Diam. Cover	Screw Spacing	Carton	Std. Pkg.	Pkg. Wt.	Price Each
600	------	------	10	100	20	**$0.60**
		With Outlet Box Cover				
601	3½	2¾	10	100	54	**.80**
602	4⅛	3½	10	100	55	**.80**

Leads consist of all rubber No. 14 stranded wire, 6 inches long. For leads longer than 6 inches add to above list prices for each additional lineal foot desired, **$.075.**

SAFEWAY RUBBER COVERED PLUGS

Daniel Woodhead Company Products

Approved by Underwriters

Safeway Rubber Covered Plugs are built for heavy duty industrial and railroad service. The brass blades, which are mounted on approved insulating material, can be removed from the rubber body. These plugs are practically non-breakable as well as being safe to handle.

2-WIRE CAPS

15 Amp., 125 Volts; 10 Amp., 250 Volts



No. 1400 No. 1401 No. 1402

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.	Price Each
1400	2-Wire Cap	10	100	13	**$0.55**
1401	2-Wire Tandem	10	100	13	**.65**
1402	2-Wire Polarity	10	100	13	**.65**

2-WIRE CAPS WITH CORD GRIP

15 Amp., 125 Volts; 10 Amp., 250 Volts

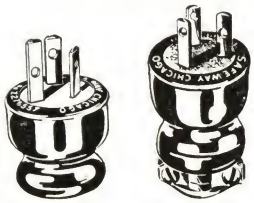


No. 1404 No. 1405 No. 1406

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.	Price Each
1404	2-Wire Cap Cord Grip	10	100	18	**$0.90**
1405	2-Wire Tandem Cord Grip	10	100	18	**1.00**
1406	2-Wire Polarity Cord Grip	10	100	18	**1.00**

3-WIRE CAPS—GROUNDED

15 Amp., 125 Volts; 10 Amp., 250 Volts



No. 1403 No. 1407

3-Wire Grounded

Cat. No.	Carton	Std. Pkg.	Pkg. Wt.	Price Each
1403	10	100	13	**$0.75**

3-Wire Grounded Cord Grip

1407	10	100	19	**1.10**

2-WIRE SEPARABLE SWIVEL TYPE

15 Amp., 125 Volts
10 Amp., 250 Volts

Cat. No.	Carton	Std. Pkg.	Pkg. Wt.	Price Each
1408	10	100	25	**$2.20**



All above caps, except those with cord grip, have 7/16-inch cord hole. Can be had with cord holes ¼ to ⅝-inch on specifications. Caps with cord grip have ¾-inch cord hole.

Assortment of any Safeway Cap or Cord Connector in carton lots permitted to make standard package.

PRoTEX RUBBER COVERED PLUGS

Daniel Woodhead Company Products

JUNIOR AND MIDGET TYPES

15 Amp., 125 Volts; 10 Amp., 250 Volts



No. 1422



No. 1420

Cat. No.	Cord Hole	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
1420	5/16	10	100	8	$0.25
1421	7/16	10	100	8	.25
1422	1/4	10	100	4	.25

SAFEWAY RUBBER CORD CONNECTORS

Daniel Woodhead Company Products

2-WIRE BODY AND CAP

15 Amp., 125 Volts; 10 Amp., 250 Volts



No. 1500



No. 1504

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.	Price Each
1500	Parallel Body only	10	100	13	$0.90
1504	Parallel Body and Cap	5	50	13	1.45
1501	Polarity Body only	10	100	13	1.00
1505	Polarity Body and Cap	5	50	13	1.65

With Cord Grip



No. 1502



No. 1506

1502	Parallel Body and Grip	10	100	18	$1.25
1506	Parallel Body, Cap and Grip	5	50	18	2.15
1503	Polarity Body and Grip	10	100	18	1.35
1507	Palarity Body, Cap and Grip	5	50	18	2.35
1508	3-Wire Body and Grip	10	100	18	1.70
1509	3-Wire Body, Cap and Grip	5	50	18	2.80

SAFEWAY WEATHERPROOF RUBBER PLUG

Daniel Woodhead Company Products



Plug body is made of a high quality oil and heat-resisting rubber compound, molded into a nickel-plated screw base with No. 14 stranded, all-rubber leads, so vulcanized as to form a one-piece, waterproof and non-breakable attachment plug, with 6-inch leads.

For leads longer than 6 inches add to the list price for each additional lineal foot, $.075.

Cat. No.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
1409	10	100	15	$0.95

UNION INSULATING SOCKETS

Listed by Underwriters' Laboratories, Inc.

WEATHERPROOF BAKELITE SOCKETS



No. 43310



No. 60666



No. 53310

These Bakelite sockets are recommended for use where the socket will be subjected to exceptional abuse. All sockets supplied with spring contacts unless solid contacts specified.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
43310	Bakelite	25	100	13	$26.63
43310	Extratuf	25	100	13	28.94
60666	Bakelite	25	100	14	31.69
53310	Extratuf	25	100	15	42.85

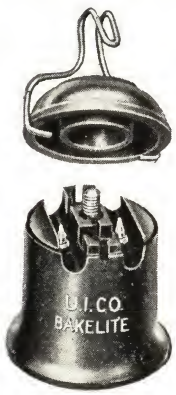
FABRIC IMPREGNATED CANVAS BAKELITE WEATHERPROOF SOCKET



Canvas impregnated with bakelite makes this socket practically indestructible. For use where sockets receive the greatest abuse. Phosphorous bronze spring (or solid) contacts. Stranded No. 14, 6-in leads. 660 watts, 600 volts.

Cat. No.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
63310	25	100	15	$51.16

BAKELITE EVER-READY PIN-TYPE SOCKETS



No. 43308



No. 44408

Cat. No.	Base	For Wires	Wt. Lbs. Std. Pkg.	Price Per 100
43308	Med.	14&12	11½	$30.00
43318	Med.	12&10	11½	30.00
44408	Inter.	18&16	4	19.00
44418	Inter.	14	4½	26.00
11108	Cand.	18	2¼	15.00
11108N	Cand.	20	2¼	15.00

Carton, 10; standard package, 100.

SPRING-ACTION PLUG CAPS

SAFETY PLUG CAPS



No. 171

No. 171

3-wire cord clamp rubber attachment plug cap. Polarized; 3 Spring-Action blades. One size plug handles all size wires. Solid riveted clamp for absolute strain relief. Finger grip rubber.

Cat. No.	10 Amps.	15 Amps.	Price Each
171	250 V	125 V	$0.66

Nos. 172–173–173G

2-wire cord clamp attachment plug cap. Standard parallel Spring-Action blades. Takes all wire sizes. Complete strain relief.



No. 172, 173

Cat. No.	Description	Price Each
172	Rubber Plug Cap	$0.39
173	Bakelite Plug Cap	.37
173G	Same as No. 173 with ground hole	.39

RUBBER HANDLE GRIP CAPS


No. 102



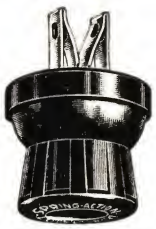
No. 108



No. 110



No. 117


No. 127

Cord hole size, Nos. 102-117, .375; No. 127 heavy duty, .540.

Cat. No.	Description	Price Each
102	Long shank	$0.15
108	Small shank	.15
110	Plain,, long shank	.15
117	Medium shank	.15
127	Heavy duty	.20

HEAVY DUTY HANDLE GRIP CAP



Cat. No.	Description	Hole Size	Price Each
101	Brown Bakelite	.312	$0.10
101-I	Ivory Bakelite	.312	.15

PONY GRIP CAP


No. 100

Cat. No.	Description	Hole Size	Price Each
100	Brown Bakelite	.375	$0.10
100-I	Ivory	.375	.15

FLAT SIDE GRIP CAPS

Fits new, 5-way outlets. Hole size .344.



No. 105



No. 107

Cat. No.	Description	Price Each
105	Brown Bakelite with handle grip	$0.15
105-I	Ivory with handle grip	.20
107	Brown Bakelite. No handle grip	.10
107-I	Ivory. No handle grip	.15

SPRING-ACTION PLUG CAPS



No. 115

RUBBER GRIP CAP

Small black rubber grip cap. Bottom groove allows wire to lay flat. Ideal in limited space.

Cat. No.	Description	Price Each
115	Black rubber	$0.15

TAPMASTER CUBE TAP

Three outlets always available. Internal and external Spring-Action blades. Internal contacts impossible to short circuit. Rich low brass inside and outside contacts.



No. 109

Cat. No.	Description	Price Each
109	Brown Bakelite	$0.15
109-I	Ivory	.20

RUBBER TAPMASTER CUBE TAP



No. 135

Incorporates a special patented, assembly feature which eliminates internal arcing. The Spring-Action blades and the cross-arm contacts are riveted together so that no arcing is possible between the metal contacts. The contacts are securely, permanently in position.

Price, No. **135** Cube Tap..each **$0.25**

FARADAY PLUGMASTER ALL-APPLIANCE CORD SET



One cord set to fit all appliances. The jaws of the patented plug automatically adjust themselves to fit all types and sizes of terminals whether they are round or flat—whether the flat ones are vertical or horizontal—whether they are ½ inch or 1⅛ inches apart — so Plugmaster fits practically any appliance.

Plugmaster may also be used as an extension cord. Listed by the Underwriters' Laboratories. Individually packed. Weight 6 oz. each. Packed 72 to carton.

Price, No. **970** Plugmaster Cord Set.....each **$1.59**

ALLIED TAPMASTER 3-WAY EXTENSION CORD SETS

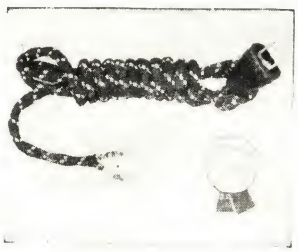


No. 810 Display Tapmaster Cord Set—Consists of No. 470 All-rubber Manufacturers Assembly Plug assembled on one end — one-piece All-rubber No. 143 Service Block on other end. Color — brown. 18-2 conductor POSJ. Available in following standard lengths: 6 and 9. Packed 25 mounted cards in shipping carton.

Cat. No.		Length Feet	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100 Sets
810-6	Display	6	25	8	$55.90
810-9	Display	9	25	10	64.00

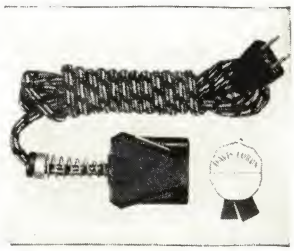
DAVIS APPLIANCE CORD SETS

REPLACEMENT CORD SET



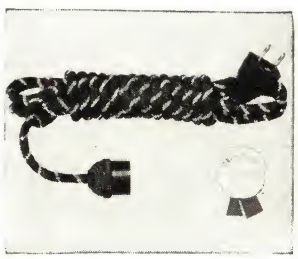
No. **60-X** 7 ft. cord set with formed terminal, for replacement of cord attached directly to iron. Without plug, 16 ga. 3 M cycle. Bulk packed..... each **$0.80**

ROASTER CORD SET



No. **60-RCH** 6 ft. roaster cord set, 16 ga. 3 M cycle heavy-duty heater cord, jumbo type plug, rubber cap, bulk packed.....each **$0.95**

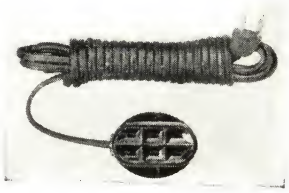
HPD EXTENSION CORD



No. **6-60EX** 6 ft. extension cord, 16 ga. 3 M cycle, heavy-duty heater cord. Extension type connector. Rubber cap. Bulk packed....each **$1.00**

No. **9-60EX** 9 ft. extension cord — same as above .....each **$1.20**

TABLE TAP CORD SETS



No. **6-40EX** 6 ft. of POSJ twin-conductor rubber cord with Table Tap, rubber cap.....each **$0.75**

No. **9-40EX** 9 ft. of POSJ twin-conductor rubber cord with Table Tap, rubber cap.....each **$0.85**

No. **12-40EX** 12 ft. of POSJ twin-conductor rubber cord with Table Tap, rubber cap....each **$0.95**

DAVIS APPLIANCE CORD SETS

No. 125 NO-TRO "WRIST-ACTION" CORD SET



No wires to break, no burned out fuses. Exclusive, patented "Wrist-Action" swivel plug twists, turns, bends, spins — eliminates looping, twisting, kinking and breaking of cord. Can easily handle any current load of household iron or appliance.

16 ga. 3 M cycle, heavy-duty heater cord, all rubber cap. Bulk packed.....each **$1.40**

RUBBER RANGE CABLES



Cat. No.	Description	Length Inches	List Price
	With Rubber Head—Strain Relief—3 Wire		
49000	2 No. 6 and 1 No. 8 wire	38	**$3.33**
49075	2 No. 8 and 1 No. 10 wire	26	**2.90**
	With Plastic Head—Strain Relief—3 Wire		
45000	2 No. 6 and 1 No. 8 wire	38	**3.00**
45050	2 No. 6 and 1 No. 10 wire	38	**2.90**
45075	2 No. 6 and 1 No. 2 wire	26	**2.90**

SURFACE AND FLUSH TYPE RANGE RECEPTACLES



No. 45033
Surface Receptacle



No. 49033
Flush Receptacle

A new 3-wire, 250 volt, 50 amp. cable and receptacle especially designed for safety and ease of installation, providing a safe, simple, economical, easy to reach plug-in outlet for electric ranges. Extra heavy construction, featuring patented Slip Lock Pressure Terminals.

3 Wire, 50 Amp., 250 Volts

Cat. No.	Description	List Price
45033	Surface Range Receptacle, UL Approved	**$2.00**
49033	Flush Type Range Receptacle, UL Approved	**2.90**
49034	Brass Flush Type Range Receptacle Plate	**1.10**

H & H WIRING DEVICES

PLUG FUSE CUT-OUTS — SOLID NEPTRAL

30 Amperes, 125 Volts


No. 29650


No. 21650

MAIN LINE

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
29650	Two-Wire	10	150	61
21650	Three-Wire	5	50	45

SINGLE BRANCH

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
19350	Two-Wire	10	100	60


No. 19350


No.25870


No. 21990

DOUBLE BRANCH


No. 23150


No. 23115

25870	Two-Wire	5	50	46
21990	Three- to Two-Wire	5	50	58
23150	Three-Wire, or 4-Circuit	5	25	41
23115	Two-Wire, or 2-Circuit	10	100	70

PLUG FUSE CUT-OUTS — FUSED NEUTRAL

30 Amp., 125 Volts

MAIN LINE


No. 2569


No. 2965


No. 2165

2569	Single Pole	10	100	40
2965	Two-Wire	10	100	56
2165	Three-Wire	5	50	46


No. 1935


No. 8020

SINGLE BRANCH

1935	Two-Wire	5	50	42
8020	Two-Wire, or Double Cross-over Branch	5	50	48

DOUBLE BRANCH


No. 2587


No. 2199

2587	Two-Wire	5	50	60
2199	Three- to Two-Wire	5	50	76

H & H WIRING DEVICES


No. 4018

ENTRANCE SWITCH SMALL SIZE

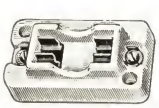
30 Amp., 125 Volts

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.
4017	Fuses at Top	10	50	52
4018	Fuses at Bottom	10	50	52

Dimensions, 4 7/8 x 3 inches.

MOHICAN CARTRIDGE FUSE CUTOUTS

Main Line, 250 Volts


No. 72569


No. 72965


No. 72165

All triple and double pole cutouts can be supplied with solid neutral when specified. If desired, add "O" to the catalog number.

Single Pole

Cat. No.	Amps.	Dimens. Inches	Carton	Std. Pkg.	Pkg. Wt.
72569	3–30	3 7/8 x 2 1/8	5	50	35
82569	31–60	5 1/16 x 2 5/16	2	50	45

Double Pole

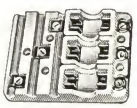
72965	3–30	3 7/8 x 3	5	50	50
82965	31–60	5 x 3 3/8	1	50	115

Triple Pole

72165	3–30	4 1/2 x 3 7/8	5	50	73
82165	31–60	5 1/16 x 5 1/16	1	50	170

SINGLE BRANCH


No. 71935


No. 78042

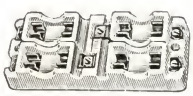
Double Pole

Cat. No.	Amps.	Dimens. Inches	Carton	Std. Pkg.	Pkg. Wt.
71935	3–30	5 x 3	1	50	70
81935	31–60	6 15/16 x 3 3/8	1	50	170

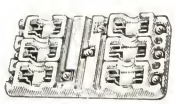
Triple Pole

78042	4–30	6 1/16 x 4 1/2	1	50	115
88042	31–60	8 1/4 x 5 1/16	1	50	316

DOUBLE BRANCH


No. 72587


No. 72199


No. 72135

Double Pole

Cat. No.	Amps.	Dimens. Inches	Carton	Std. Pkg.	Pkg. Wt.
72587	3–30	7 15/16 x 3	1	50	115
82587	31–60	10 11/16 x 3 3/8	1	25	133

Three-Two Pole

72199	3–30	9 x 3	1	25	83
82199	31–60	11 7/8 x 3 5/8	1	25	158

Triple Pole

72135	3–30	9 1/16 x 4 1/2	1	25	108
82135	31–60	11 7/8 x 5 5/16	1	10	100

Can be supplied with solderless connectors if specified on order at no extra charge

BUSS ONE-TIME FUSES

NON-RENEWABLE



1 to 60 ampere



70 to 600 ampere

Carry Underwriters' Laboratories Inspected label. But fuses cannot be judged by this label alone. It only shows they meet minimum requirements of safety.

Fuses can fail in many other ways. When one blows needlessly because of a badly soldered link —or because of heating from crooked terminals or caps—or from corrosion of link—the user pays the cost of a useless shutdown. Or when a fuse fails to blow quickly enough because of an inaccurate link, the user pays for the damage that results.

When such troubles from ordinary-run fuses kick back, the dealer pays in lost fuse orders and often loss of other business to boot.

The best guarantee of dependable protection for the user and insurance against loss of profits for the dealer is the BUSS Trade-Mark. It is KNOWN and recognized everywhere as standing for the highest quality in fuses.

BUSS One-Time fuses get the same engineering and care in manufacture as other products carrying the BUSS trade-mark—hence each and every BUSS One-Time fuse can be depended on to operate as intended.

For Voltages up to 250 Volts				For Voltages up to 600 Volts			
Symbol and Amperes	Lgth. Ins.	Car. Qty.	Price Each	Symbol and Amperes	Lgth. Ins.	Car. Qty.	Price Each
NON 1				NOS 1			
NON 3				NOS 3			
NON 6				NOS 6			
NON 10				NOS 10			
NON 15	2	10	$0.15	NOS 15	5	10	$0.50
NON 20				NOS 20			
NON 25				NOS 25			
NON 30				NOS 30			
NON 35				NOS 35			
NON 40				NOS 40			
NON 45	3	10	.30	NOS 45	5½	10	.80
NON 50				NOS 50			
NON 60				NOS 60			
NON 70				NOS 70			
NON 80	5⅞	5	.90	NOS 80	7⅞	5	1.80
NON 90				NOS 90			
NON 100				NOS 100			
NON 110				NOS 110			
NON 125				NOS 125			
NON 150	7⅛	1	2.00	NOS 150	9⅝	1	3.50
NON 175				NOS 175			
NON 200				NOS 200			
NON 225				NOS 225			
NON 250				NOS 250			
NON 300	8⅝	1	3.60	NOS 300	11⅝	1	7.00
NON 350				NOS 350			
NON 400				NOS 400			
NON 450				NOS 450			
NON 500	10⅜	1	5.50	NOS 500	13⅜	1	10.00
NON 600				NOS 600			

BUSS SUPER-LAG RENEWABLE FUSES

N. E. C. Standard



3 to 60 Amperes



70 to 600 Amperes

Reduce to extent not possible with other renewable fuses, number of shutdowns caused by needless blows. Patent fuse-case and Super-Lag link make this possible. Save time and money and decrease out-of-service losses.

Costs often cut in half on new motor installations as Code (Paragraph 4346) in many cases permits smaller size fused safety switches, fuse panels or fuse blocks if Buss Super-Lag fuses are used.

Every Buss Super-Lag fuse carries inspection label of Underwriters' Laboratories.

250-Volt Fuses				600-Volt Fuses		
Symbol and Amperes	Wt. Lbs. Per 100	Price Each	Carton	Symbol and Amperes	Wt. Lbs. Per 100	Price Each
REN3	5.5	$0.40	10	RES3	18	$1.00
REN6	5.5	.40	10	RES6	18	1.00
REN10	5.5	.40	10	RES10	18	1.00
REN15	5.5	.40	10	RES15	18	1.00
REN20	5.5	.40	10	RES20	18	1.00
REN25	5.5	.40	10	RES25	18	1.00
REN30	5.5	.40	10	RES30	18	1.00
REN35	14	.80	10	RES35	36	1.60
REN40	14	.80	10	RES40	36	1.60
REN45	14	.80	10	RES45	36	1.60
REN50	14	.80	10	RES50	36	1.60
REN60	14	.80	10	RES60	36	1.60
REN70	46	1.80	5	RES70	83	3.60
REN80	46	1.80	5	RES80	83	3.60
REN90	46	1.80	5	RES90	83	3.60
REN100	46	1.80	5	RES100	83	3.60
REN110	109	4.00	1	RES110	183	7.00
REN125	109	4.00	1	RES125	183	7.00
REN150	109	4.00	1	RES150	183	7.00
REN175	109	4.00	1	RES175	183	7.00
REN200	109	4.00	1	RES200	183	7.00
REN225	266	7.20	1	RES225	373	14.00
REN250	266	7.20	1	RES250	373	14.00
REN300	266	7.20	1	RES300	373	14.00
REN350	266	7.20	1	RES350	373	14.00
REN400	266	7.20	1	RES400	373	14.00
REN450	389	11.00	1	RES450	573	20.00
REN500	389	11.00	1	RES500	573	20.00
REN600	389	11.00	1	RES600	573	20.00

BUSS SUPER-LAG RENEWAL FUSE LINKS



3 to 60 Amperes



70 to 600 Amperes

Super-Lag design gives BUSS Links a long time-lag that reduces number of blows on starting currents or other harmless overloads.

Give better protection because they permit fuseing nearer to load.

Come in one piece in all sizes. This makes renewal handy and prevents poor contact developing while fuse is in use.

Packed in small quantity in sealed boxes for convenience and to prevent dust, moisture or oxidation from affecting them.

Interchangeable with all makes of standard fuse links.

250-Volt Links				600-Volt Links		
Symbol and Amperes	Wt. Lbs. Per 100	Price Each	Carton	Symbol and Amperes	Wt. Lbs. Per 100	Price Each
LKN3	.25	$0.02	20	LKS3	1	$0.05
LKN6	.25	.02	20	LKS6	1	.05
LKN10	.25	.02	20	LKS10	1	.05
LKN15	.25	.02	20	LKS15	1	.05
LKN20	.25	.02	20	LKS20	1	.05
LKN25	.25	.02	20	LKS25	1	.05
LKN30	.25	.02	20	LKS30	1	.05
LKN35	1	.04	20	LKS35	3	.08
LKN40	1	.04	20	LKS40	3	.08
LKN45	1	.04	20	LKS45	3	.08
LKN50	1	.04	20	LKS50	3	.08
LKN60	1	.04	20	LKS60	3	.08
LKN70	2	.09	10	LKS70	5	.18
LKN80	2	.09	10	LKS80	5	.18
LKN90	2	.09	10	LKS90	5	.18
LKN100	2	.09	10	LKS100	5	.18
LKN110	5	.20	5	LKS110	14	.35
LKN125	5	.20	5	LKS125	14	.35
LKN150	5	.20	5	LKS150	14	.35
LKN175	5	.20	5	LKS175	14	.35
LKN200	5	.20	5	LKS200	14	.35
LKN225	11	.36	5	LKS225	29	.70
LKN250	11	.36	5	LKS250	29	.70
LKN300	11	.36	5	LKS300	29	.70
LKN350	11	.36	5	LKS350	29	.70
LKN400	11	.36	5	LKS400	29	.70
LKN450	16	.55	2	LKS450	37	1.00
LKN500	16	.55	2	LKS500	37	1.00
LKN600	16	.55	2	LKS600	37	1.00

BUSS Clear Window PLUG FUSES



Carry Underwriters' Laboratories inspected label.

Buss fuses have an extra large, clear window which makes it easy to see if fuse is blown.

Metal cap protects fuse against chipping that might cut fingers or weaken fuse. Buss fuses are shockproof — insulated with porcelain and mica like high voltage power lines. They will always fit in holder as there is no solder lump on outside to cause trouble.

Packed 5 in a colorful carton that carries complete information on why fuses blow and what to do when they do blow.



Symbol	Amp.	Wt. Lbs. Per 1000	Price Each	Symbol	Amp.	Wt. Lbs. Per 1000	Price Each
W1	1	65	$0.08	W10	10	65	$0.07
W3	3	65	.08	W15	15	65	.07
W5	5	65	.08	W20	20	65	.07
W6	6	65	.08	W25	25	65	.07
W8	8	65	.08	W30	30	65	.07

15 to 30 AMP. FUSETRON dual-element Plug Fuses



15 ampere Fusetron dual-element fuses provide safe protection. They won't blow on motor-starting current or any current which lasts only a short time, because of their thermal element, yet they protect on dangerous overloads or short-circuits.

20, 25 and 30 amp. sizes for use on appliance circuits or mains give the same kind of protection against useless blows. Carry Underwriters' Laboratories inspected label. For voltages up to 125. Packed 4 in a colorful carton.

Amp.	Symbol	Price	Amp.	Symbol	Price
15	T15	$0.10	25	T25	$0.10
20	T20	.10	30	T30	.10

Packed 4 in a box.

BUSS –TYPE S– FUSTATS

15 TO 30 AMP.—FOR CIRCUIT PROTECTION

Operates like Fusetron dual-element Plug Fuses
Non-tamperable (Type S) Base



Fustat



Adapter

The Fustat is Bussmann's dual element fuse with type "S" base. It has a fuse link and a thermal cutout. Makes safe protection remain safe. Stops loss of money on needless "blown-fuse" service calls. Stops use of pennies or slugs; practically impossible to bridge with tinfoil, wire or any other material. A 20, 25, or 30 ampere size will not fit in a 15-ampere receptacle or adapter. Can be used in Edison base receptacles by use of adapter. Adapters not included with Fustats, must be ordered separately. Listed by Underwriters' Laboratories as Type S fuses, in 15 to 30 amp. sizes. For circuit protection on voltages up to 125.

Amp.	FUSTAT Symbol	FUSTAT Price	ADAPTER Symbol	ADAPTER Price
15	S15	$0.10	SA15	$0.07½
20	S20	.10	SA20	.07½
25	S25	.10	SA30	.07½
30	S30	.10		

0 to 14 AMPERE BUSS FUSTATS

To Protect Against Burned-Out Motors and Apparatus of Voltages up to 125



Fustat


Adapter

Protect motors against burnout from such things as dry bearings, overload, etc. Prevent costly repair bills.

For size to use, get ampere rating of motor or apparatus from name plate, and install a Fustat of a size nearest to that figure. Then if device is in danger of burnout, the Fustat will open. Also protects like a fuse against short-circuit.

Have non-tamperable base — which prevents anyone replacing them with a penny or readily bridging them — and prevents the use of sizes too large to protect.

Fustats fit all regular plug fuse holders through the use of an inexpensive adapter which locks in place.

Carry Underwriters' Laboratories Label and have the same degree of approval for motor-running protection as the most expensive devices made.

Packed 4 in a carton, carrying complete instructions.

Amp.	FUSTAT Symbol	FUSTAT Price	ADAPTER Symbol	ADAPTER Price
1	S1	$0.20	SA1	$0.07½
1¼	S1¼	.20	SA1¼	.07½
1 6/10	S1 6/10	.20	SA1 6/10	.07½
2	S2	.20	SA2	.07½
2½	S2½	.20	SA2½	.07½
3 2/10	S3 2/10	.20	SA3 2/10	.07½
4	S4	.20	SA4	.07½
5	S5	.20	SA5	.07½
6¼	S6¼	.20	SA6¼	.07½
8	S8	.20	SA8	.07½
10	S10	.20	SA10	.07½
12	S12	.20	SA15	.07½
14	S14	.20	SA15	.07½

Many other sizes from 3/10 to 9 amperes can be obtained. Adapters not included with Fustats — must be ordered separately.

0 to 14 AMP. FUSETRON dual-element PLUG FUSES



Fusetron fuses, like Fustats, can be used to protect motors or apparatus against burnout. Have Edison base — hence insurance and inspection authorities and Underwriters' Laboratories do not recommend their use because all protection is lost if Fusetron or ordinary fuses of too large a size are used. Fustats, because of their non-tamperable feature, are recommended for this work.

Amp.	Symbol	Price	Amp.	Symbol	Price
1	T1	$0.20	5	T5	$0.20
1¼	T1¼	.20	6¼	T6¼	.20
1 6/10	T1 6/10	.20	8	T8	.20
2	T2	.20	10	T10	.20
2½	T2½	.20	12	T12	.20
3 2/10	T3 2/10	.20	14	T14	.20
4	T4	.20			

Packed 4 in a carton, weight 7.7 lbs. per 100.

BUSS FUSTAT BOX-COVER UNITS

Three Combinations to Choose From


Plug-In Receptacle with Fustat


Switch with Fustat


Fustat Alone

Mounted on Any One of Four Covers to Fit Boxes in Use


Handy or Switch Box Cover


Octagon Box Cover 4 Inch Round


Square Box Cover 4 Inch Square

A simple, low cost way to protect 125 volt motors. A box-cover on which a Fustat can be mounted — alone or in combination with a plug-in receptacle or switch.

There are four different sizes to fit the box you have. Units have Edison base fuseholder so proper size Fustat Adapter can be used. They are listed as approved by Underwriters' Laboratories when Adapter has been inserted.

On normal installations, use Fustat of motor-running protection size. Mount it anywhere in the circuit to handle only the motor current.

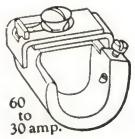
These Box-Cover Units make it as easy to install motor protection as it is a wall switch. Use them to prevent burnout of motors on Home, Farm, Office, Factory Appliances and Equipment—from such things as: lack of oil, worn bearings, tight bolts, overloading or wrong or low voltage.

Units without switch for any motor ¾ h.p. or smaller. Units with switch for AC motors only—½ h.p. or smaller.

Symbol	Description	List Price
	With Switch	
SSU	On 2¼ inch Handy box cover	$1.15
SSW	On 2¾ inch Switch box cover	1.15
SSX	On 4 inch Octagon box cover	1.25
SSY	On 4 inch Square box cover	1.25
	With Plug-In Receptacle	
SRU	On 2¼ inch Handy box cover	1.00
SRW	On 2¾ inch Switch box cover	1.00
SRX	On 4 inch Octagon box cover	1.10
SRY	On 4 inch Square box cover	1.10
	Fustat Holder Only	
SOU	On 2¼ inch Handy box cover	.60
SOW	On 2¾ inch Switch box cover	.60
SOX	On 4 inch Octagon box cover	.70
SOY	On 4 inch Square box cover	.70

Fustats and Adapters are not included with Box-Cover Units, order them separately.

BUSS FUSE REDUCERS



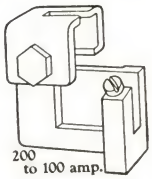
Make it possible to use Fusetron or ordinary fuses of a size smaller than the fuse clips are intended to hold.

Fit in any panel or switch as reducers take up no more space than would a fuse of a size to fit clips.

Poor contact troubles are entirely eliminated because these reducers provide clamp contact throughout.

Reducers fit any form of clip, either the spring type or clamp type.

Packed—one pair in a carton.



Volts	Amp. Rating	No.	Price per pair
250 Volt	60 to 30	263	$0.70
250 Volt	100 to 30	213	1.30
250 Volt	100 to 60	216	.95
250 Volt	200 to 60	226	2.90
600 Volt	60 to 30	663	.80
600 Volt	100 to 30	Use No. 216	
600 Volt	100 to 60	616	1.70
600 Volt	200 to 60	626	4.75
250 or 600 V.	200 to 100	2621	1.90
250 or 600 V.	400 to 200	2642	2.90

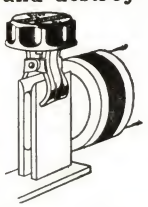
BUSS CLIP-CLAMPS

Insure Good Contact Between Clips and Fusetron or Ordinary Fuses



Prevent needless blowing of fuses by eliminating heating from poor contact that often causes fuses to blow.

Reduce needless destruction of fusecases by preventing poor contact from burning up the fibre tube and destroying the fuse.



Makes replacement of fuse-clips unnecessary. Generally permits even injured clips to be used with perfect satisfaction.

Built for hard service and to prevent corrosion, all steel parts are heavily cadmium plated.

Cat. No.	Size of Clamp	Carton Qty.	Wt. Lbs. Per 100	Price Each
1	0- 30 amp. 250 volt	12	5	$0.73
2	31- 60 amp. 250 volt 0- 30 amp. 600 volt	12	8	.93
4	31- 60 amp. 600 volt	12	12	1.25
5	61-100 amp. 250or600V.	12	10	1.15
6	101-200 amp. 250or600V.	6	21	1.77
7	201-400 amp. 250or600V.	6	31	2.40
8	401-600 amp. 250or600V.	6	42	3.44

FUSETRON dual-element FUSES

250 AND 600 VOLT

250 Volt				600 Volt			
Symbol and Amperes	Wt. Lbs. Per 100	Price Each	Carton	Symbol and Amperes	Wt. Lbs. Per 100	Price Each
FRN 175	88	$3.60	1	FRS 175	125	$6.25
FRN 200	88	3.60	1	FRS 200	125	6.25
FRN 225	182	6.50	1	FRS 225	305	12.50
FRN 250	182	6.50	1	FRS 250	305	12.50
FRN 300	182	6.50	1	FRS 300	305	12.50
FRN 350	182	6.50	1	FRS 350	305	12.50
FRN 400	182	6.50	1	FRS 400	305	12.50
FRN 450	304	10.00	1	FRS 450	480	18.00
FRN 500	304	10.00	1	FRS 500	480	18.00
FRN 600	304	10.00	1	FRS 600	480	18.00

FUSETRON dual-element FUSES

250 AND 600 VOLT



Made to fit ordinary fuse holders. A Fusetron dual-element fuse has a fuse link element to protect against short-circuits and a thermal cutout element to protect against overloads. It has tremendous time-lag and much less electrical resistance.

For all types of circuits or feeders (motor as well as lighting, etc.) they are highly desirable. Their long time-lag prevents useless shutdowns caused by ordinary fuses or breakers opening on motor starting currents or other harmless overloads. They will hold even if all motors on circuit start at one time — yet they protect against short-circuit with all the speed of a fuse.

Their lower resistance means that switches and panelboards will operate at a much cooler temperature than with other fuses. This prevents damage and wipes out needless blowing of fuses so often caused by excessive heating.

Fusetron dual-element fuses carry Underwriters' Laboratories label and are approved for both motor-running and circuit protection.

250 Volt				600 Volt		
Symbol and Amperes	Wt. Lbs. Per 100	Price Each	Carton	Symbol and Amperes	Wt. Lbs. Per 100	Price Each
FRN 1/10	3½	$0.30	10	FRS 1/10	14	$0.75
FRN 15/100	3½	.30	10	FRS 15/100	14	.75
FRN 2/10	3½	.30	10	FRS 2/10	14	.75
FRN 3/10	3½	.30	10	FRS 3/10	14	.75
FRN 4/10	3½	.30	10	FRS 4/10	14	.75
FRN 1/2	3½	.30	10	FRS 1/2	14	.75
FMN 6/10	3½	.30	10	FRS 6/10	14	.75
FRN 8/10	3½	.30	10	FRS 8/10	14	.75
FRN 1	3½	.30	10	FRS 1	14	.75
FRN 1 1/8	3½	.30	10	FRS 1 1/8	14	.75
FRN 1 1/4	3½	.30	10	FRS 1 1/4	14	.75
FRN 1 4/10	3½	.30	10	FRS 1 4/10	14	.75
FRN 1 6/10	3½	.30	10	FRS 1 6/10	14	.75
FRN 1 8/10	3½	.30	10	FRS 1 8/10	14	.75
FRN 2	3½	.30	10	FRS 2	14	.75
FRN 2 1/4	3½	.30	10	FRS 2 1/4	14	.75
FRN 2 1/2	3½	.30	10	FRS 2 1/2	14	.75
FRN 2 8/10	3½	.30	10	FRS 2 8/10	14	.75
FRN 3 2/10	3½	.30	10	FRS 3 2/10	14	.75
FRN 3 1/2	3½	.30	10	FRS 3 1/2	14	.75
FRN 4	3½	.30	10	FRS 4	14	.75
FRN 4 1/2	3½	.30	10	FRS 4 1/2	14	.75
FRN 5	3½	.30	10	FRS 5	14	.75
FRN 5 6/10	3½	.30	10	FRS 5 6/10	14	.75
FRN 6 1/4	3½	.30	10	FRS 6 1/4	14	.75
FRN 7	3½	.30	10	FRS 7	14	.75
FRN-8	3½	.30	10	FRS 8	14	.75
FRN 9	3½	.30	10	FRS 9	14	.75
FRN 10	3½	.30	10	FRS 10	14	.75
FRN 12	5	.30	10	FRS 12	16	.75
FRN 15	5	.30	10	FRS 15	16	.75
FRN 17 1/2	5	.30	10	FRS 17 1/2	16	.75
FRN 20	5	.30	10	FRS 20	16	.75
FRN 25	5	.35	10	FRS 25	16	.85
FRN 30	5	.35	10	FRS 30	16	.85
FRN 35	12	.70	10	FRS 35	26	1.50
FRN 40	12	.70	10	FRS 40	26	1.50
FRN 45	12	.70	10	FRS 45	26	1.50
FRN 50	12	.70	10	FRS 50	26	1.50
FRN 60	12	.70	10	FRS 60	26	1.50
FRN 70	35	1.65	5	FRS 70	56	3.20
FRN 80	35	1.65	5	FRS 80	56	3.20
FRN 90	35	1.65	5	FRS 90	56	3.20
FRN 100	35	1.65	5	FRS 100	56	3.20
FRN 110	88	3.60	1	FRS 110	125	6.25
FRN 125	88	3.60	1	FRS 125	125	6.25
FRN 150	88	3.60	1	FRS 150	125	6.25

BUSS FUSES

FUSETRON DUAL-ELEMENT FUSES AND FUSE HOLDERS

For Protection of Television, Instruments and Electronic Equipment



Formerly called 8AG. Dimensions ¼ x 1-inch, glass tube. Provide high speed action necessary to protect sensitive instruments.

Test specification—carry 100%, open at 200% in 5 seconds.

Voltage — 250 or Less

Symbol and Amperes	Price Each	Symbol and Amperes	Price Each
MJB 1/500	$0.70	MJB 1/100	$0.20
MJB 1/200	.30	MJB 1/32	.20



Formerly called 8AG. Dimensions ¼ x 1-inch, glass tube. Provide high speed action necessary to protect instruments.

Test Specification—carry 100%, open at 200% in 5 seconds. AGX are listed as approved by Underwriters' Laboratories, Inc.

250 Volts or Less		125 Volts or Less	
Symbol and Amperes	Price Each	Symbol and Amperes	Price Each
MJW 1/16	$0.15	AGX 3/4	$0.12
MJW 1/8	.15	AGX 1	.10
AGX 1/8	.15	AGX 1½	.10
AGX 1/4	.12	AGX 2	.10

¼ x 1-INCH BUSS FUSES



Formerly called 8AG. Glass tube. Test Specification—carry 110%, open at 135% in 1 hour. 125 volt sizes listed as approved by Underwriters' Laboratories, Inc.

125 Volts or Less		32 Volts or Less	
Symbol and Amperes	Price Each	Symbol and Amperes	Price Each
AGX 3	$0.10	AGX 20	$0.05
AGX 5	.05		

¼ x 1¼-INCH BUSS GLASS TUBE FUSES



Formerly called 3AG. Provide high speed action necessary to protect sensitive instruments. Test Specifications—carry 110%, open at 135% in one hour.

250 Volts or Less

Symbol and Amperes	Price Each	Symbol and Amperes	Price Each
MBW 1/6	$0.15	MBW 1/8	$0.15



AGC and MTH 4, 5 and 6



MTH 8

Formerly called 3AG. Test Specification—carry 110%, open at 135% in one hour. Listed as approved by the Underwriters' Laboratories, Inc.

250 Volts or Less

Symbol and Amperes	Price Each	Symbol and Amperes	Price Each
AGC 1/8	$0.15	AGC 1½	$0.07
AGC 1/4	.15	AGC 2	.07
AGC 3/8	.15	AGC 3	.07
AGC 1/2	.15	MTH 4	.10
AGC 3/4	.15	MTH 5	.10
AGC 1	.07	MTH 6	.10
		MTH 8	.15

BUSS FUSES

FUSETRON DUAL-ELEMENT FUSES AND FUSE HOLDERS

For Protection of Television, Instruments and Electronic Equipment

¼ x 1¼-INCH BUSS GLASS TUBE FUSES

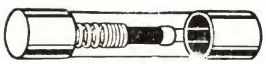


Formerly called 3AG. Test Specifications—carry 110%, open at 135% in 1 hour.

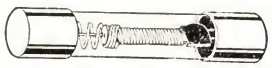
32 Volts or Less

Symbol and Amperes	Price Each	Symbol and Amperes	Price Each
AGC 5	$0.05	AGC 15	$0.04
AGC 6	.05	AGC 25	.05
AGC 7½	.05	AGC 30	.05
AGC 10	.04		

¼ x 1¼-INCH FUSETRON FUSES



1/100 & 1/32 amp.



1/16 to 2 amp.



2½ to 30 amp.

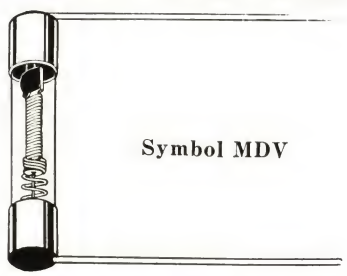
These fuses avoid needless blows from starting currents or surges. They have a fuse link which operates only on a very high overload or short circuit—they have a thermal cutout which functions on low overloads—the thermal cutout cannot operate quickly on any load, hence long time-lag is obtained. Yet protection is afforded against short-circuits or continued overloads.

Test Specification—carry 110%, open at 135% in one hour.

Approximate blowing time: at 200% load, 25 seconds; at 300% load, 8 seconds; at 500% load, 3 seconds.

250 Volts or Less		125 Volts or Less		32 Volts or Less	
Symbol and Amperes	Price Each	Symbol and Amperes	Price Each	Symbol and Amperes	Price Each
MDL 1/100	$0.25	MDL 1¼	$0.20	MDL 4	$0.20
MDL 1/32	.25	MDL 1-6/10	.20	MDL 5	.20
MDL 1/16	.25	MDL 2	.20	MDL 6¼	.20
MDL 1/10	.25	MDL 2½	.20	MDL 8	.20
MDL 15/100	.25	MDL 2-8/10	.20	MDL 10	.20
MDL 2/10	.25	MDL 3-2/10	.20	MDL 15	.20
MDL 3/10	.25			MDL 20	.20
MDL 4/10	.25			MDL 25	.20
MDL 1/2	.25			MDL 30	.20
MDL 6/10	.25				
MDL 8/10	.25				
MDL 1	.25				

FUSETRON PIG-TAIL FUSES



Symbol MDV

These are MDL fuses with 1½-inch tinned wire leads. 0 to 8 amp. have No. 20 wire, 10 to 15 amp. have No. 16 wire and 20 to 30 amp. have No. 14 wire.

125 and 250 volt sizes listed as approved by Underwriters' Laboratories Inc.

Popularly used on television sets. For sizes and all other information, see MDL fuses above.

BUSS FUSES

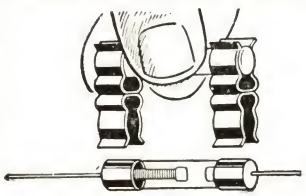
BUSS TWIN-CLIPS FOR ¼-INCH FUSES



Make it easy to replace blown pig-tail fuses without cutting or unsoldering pig-tails.

Just snap Twin-Clips on blown fuse and insert ordinary or Fusetron fuse of same amperage as blown fuse.

Strong spring clip assures good contact. Simplifies fuse stocking problem by permitting use of standard fuses. Saves service man's time. Helps build user good will.



Packed 5 pair (10 Twin-Clips) in handy carton that can be carried in tool kit.

Price, No. **4121** One Pair of Buss Twin-Clips **$0.15**

BUSS PIG-TAIL FUSES



Popularly used on television sets. ¼ x 1¼-inch Glass tube fuse with 1¾ inch leads of No. 20 tinned wire. Symbol GJV.

¼ x 1¼-inch Paper tube fuse with 1¾-inch leads of No. 20 tinned wire. Symbol GJC.

Test specifications—carry 110%, open at 135% in 1 hour. Listed as approved by Underwriters' Laboratories, Inc.

250 Volts or Less

Symbol and Amperes	Price Each	Symbol and Amperes	Price Each
GJV 1/8	$0.20	GJC 1/8	$0.20
GJV ¼	.20	GJC ¼	.20
GJV ⅜	.20	GJC ⅜	.20
GJV ½	.20	GJC ½	.20
GJV ¾	.20	GJC ¾	.20
GJV1	.15	GJC1	.15
GJV1 ½	.15	GJC1 ½	.15
GJV2	.15	GJC2	.15
GJV3	.15	GJC3	.15

FIBRE TUBE FUSETRON FUSES

13/32 x 1½-Inches

Dual-Element Type



A fuse with a long-time lag. Widely used on high cycle tools, juke boxes, driers, etc.

These fuses avoid needless blows from starting currents or surges. They have a fuse link which operates only on very high overloads or short circuits—they have a thermal cutout which functions on low overloads—the thermal cutout cannot operate quickly at any load, hence long time-lag is obtained. Yet protection is afforded against short-circuits or continued overloads.

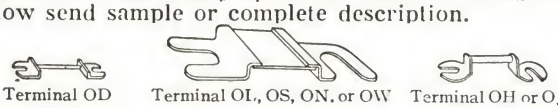
Test specification—carry 110%, open at 135% in 1 hour.

Approximate blowing time: at 200% load, 25 seconds; at 300% load, 8 seconds; at 500% load, 3 seconds. 125 and 250 volt listed as approved by Underwriters' Laboratories, Inc.

250 Volts or Less		125 Volts or Less		125 Volts or Less	
Symbol and Amperes	Price Each	Symbol and Amperes	Price Each	Symbol and Amperes	Price Each
FNM 1/10	$0.25	FNM 1¼	$0.25	FNM 12	$0.25
FNM 15/100	.25	FNM 1-6/10	.25	FNM 15	.25
FNM 2/10	.25	FNM 2	.25	32 V. or Less	
FNM 3/10	.25	FNM 2½	.25	Symbol and Amperes	Price Each
FNM 4/10	.25	FNM3-2/10	.25		
FNM 1/2	.25	FNM 4	.25		
FNM 6/10	.25	FNM 5	.25	FNM 20	.25
FNM 8/10	.25	FNM 6¼	.25	FNM 25	.25
FNM 1	.25	FNM8	.25	FNM 30	.25
		FNM 10	.25		

BUSS OPEN LINK FUSES

Buss open link fuses can be obtained with many other styles of terminals and in larger capacities. When in need of any open link fuses not listed below send sample or complete description.



Terminal OD — Terminal OL, OS, ON, or OW — Terminal OH or OJ

Set-Up Charge, $1.50 for each size and type fuse ordered on each shipment.

Amperes	Standard Terminal Type	Slot In.	Width. In.	Old No.	Other Terminal	Price Each
1 to 30	OD	5/32	⅜	1	OH	$0.04
35 to 60	OH	3/16	9/16	3	OJ	.05
65 to 100	OJ	¼	11/16	5	....	.08
110 to 200	OL	⅜	¾	7	OS	.13
225 to 400	OS	7/16	1 1/32	16	ON	.22
450 to 600	ON	½	1⅜	10	OS	.40
650 to 1000	OW	⅝	2 1/16	28	ON	.80

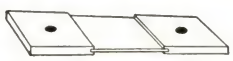
In ordering, be sure to specify exact amperage and length desired. By length is meant the center to center dimension of the slots in the terminals. This dimension will be indicated by one of symbols shown alongside, this symbol immediately following the terminal symbol.

1	inch A	3	inch N
1¼	inch C	3½	inch R
1½	inch D	4	inch S
1¾	inch F	5	inch U
2	inch H	6	inch X
2¼	inch J	7	inch Y
2½	inch L	8	inch Z

Unless otherwise specified, standard terminals as above listed will be furnished. The terminals listed under heading "Other Terminal" can be obtained if desired without additional cost.

Slots are slightly larger than dimensions given so that bolts of such sizes will fit the slot. Terminals are all copper.

LARGE OPEN LINK FUSES

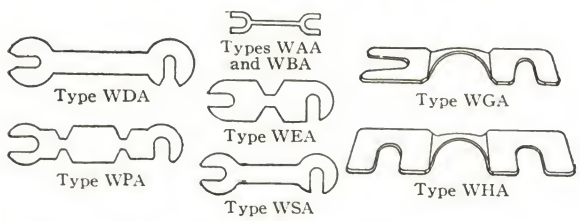


Terminals of cold rolled copper — entirely flat, one edge being slotted to receive the fuse strip.

When ordering, specify —
ampere rating desired,
width, length and thickness of terminals,
size of hole desired,
center to center dimension of terminal hole.

If more than one hole in each terminal is desired, a sketch of the fuse must be submitted in addition to the information above requested.

STAMPED OPEN LINK FUSES



Types WGA and WHA usually made of copper. All other types usually made of zinc.

Type	Old No.	Center to Center In.	Maximum Width of Terminal Slot In.	Maximum Width of Terminal Portion In.	Usual Amperages	Price Each	Set-up Charge
WAA	A	1¼	3/16	⅜		$0.02	$1.50
WBA	B	1⅝	3/16	15/32		.02	1.50
WSA	S	1¾	9/32	¾	20 to 200	.025	2.50
WDA	D	2 1/16 to 2⅝	¼	⅞	30 to 200	.035	1.50
WPA	P	2⅜	9/32	23/32	30 to 200	.035	1.50
WGA	G	2⅛	7/16	1	35 to 750	.12	2.50
WHA	H	3	9/16	2	500 to 1500	.17	2.50
WEA	66A	1 9/16	¼	¾	75 or 125	.035	1.50

Set-Up Charge applies on each shipment on each size and type.

IDEAL FUSE CLIP CLAMPS

Eliminate unnecessary watt loss, fuse and fuse clip replacement. Assure proper alignment and positive contact between fuse and clips. The seven sizes listed provide for all possible requirements.



Cat. No.	Size, Amps. 250V.	Size, Amps. 600V.	Std. Pkg.	Price Each
	Ferrule Type			
32-001	30	....	12	**$0.88**
32-002	60	30	12	**1.12**
32-003	....	60	6	**1.50**
	Knife Type			
32-004	100	100	6	**1.38**
32-005	200	200	6	**2.12**
32-006	400	400	6	**2.88**
32-007	600	600	6	**4.12**

IDEAL FUSE REDUCERS

Protect overfused circuits without expense of special fuses, change in switch panel or equipment. Eliminate fire hazards and burnouts. Handy for emergency use. Fully approved. Listed by Underwriters' Laboratories.



250-Volt Cat. No.	Ampere	Price Each	600-Volt Cat. No.	Ampere	Price Each
*33-001	60-30	$1.20	*33-025	60-30	$2.20
*33-002	100-30	2.00	33-026	100-30	2.30
*33-003	100-60	2.00	*33-027	100-60	3.20
33-006	200-100	5.30	*33-030	200-100	6.00
*33-010	400-200	10.60	*33-034	400-200	11.90
*33-015	600-400	13.20	33-039	600-400	14.50

Other sizes and prices upon request. *Stock Items.

IDEAL FUSE PULLERS

Safe-T-Grip



Ideal Safe-T-Grip Fuse Pullers have notched edges which give a sure grip, eliminating any possibility of slipping. Eliminates the danger of pulling and replacing cartridge fuses by hand and the bending of fuse clips through improper removal. Also adapted for adjusting loose cutout clips, handling electrical parts, etc.

Size	Description	Price Each
34-001	Midget For Small Fuses, ¼ to ½-inch in Diameter	**$0.80**
34-002	Pocket 0 to 200-Amp., 250-Volt, and 1 to 100-Amp., 600-Volt	**2.00**
34-003	Giant 100 to 600-Amp., 250-Volt and 60 to 400-Amp., 600-Volt	**5.34**
34-005	Combination Test Light and Fuse Puller	**6.00**

IDEAL TEST-GLO

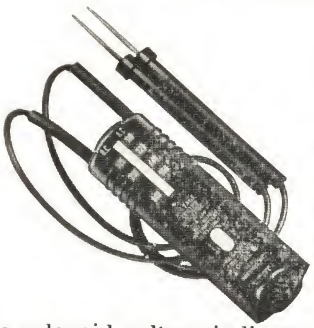


Tests motors, fuses, spark plugs, electrical and radio circuits from 80 to 250 volts, A.C.

Neon test lamp fully enclosed and protected in transparent rugged plastic housing. Adapted to high voltages by special resistor, self-contained in neat, streamlined jet black tube. A modern safety tool that every electrician, radio repair man, mechanic and maintenance man should have. Convenient chrome plated pencil clip makes the Test-Glo perfectly suited to vest pocket use.

Price, No. **35-C01** Test-Glo.....each **$2.20**

IDEAL VOLTAGE TESTER



Designed for all around electrical testing. Tests continuity of circuits, 110 to 600 volts AC/DC, blown fuses, grounded side of line, grounded side of motor or appliance, excessive leakage to ground, frequency (25 or 60 cycle), DC polarity. It incorporates both a solenoid voltage indicator and a neon test lamp. Provides double protection — either will function in the event the other fails. The test prods and leads are amply insulated for maximum protection. A protecting flange around the end of the handles stops the fingers from slipping off and touching the prods. Sturdily constructed and encased in an attractive plastic case. Has easy-to-read scale calibration from 110 to 600 volts. Overall length 6 inches; leads are 2 feet long. Test prod handles 4 inches long; test prods 2 inches long.

Price, No. **61-001** Voltage Tester, complete with carrying case.....each **$21.80**
No. **61-003** Tester without case.....each **19.80**

SQUARE D VOLTAGE TESTER

This voltage tester does not require lamps and operates on A.C. or D.C., indicating the voltage of either. Sharp points on long end of rubber - covered leads permit piercing insulation without damaging it. Can be carried in pocket. For voltages of 110 to 600 volts D.C. or A.C.



Test Prods Shielded in Receptacle

Cat. No.	Description	Std. Pkg.	Price Each
5008	Voltage Tester (complete with polarity cap)	1	**$20.50**
5002	Voltage Tester Case	1	**2.40**
5006	Voltage Tester	1	**20.50**
5007	Voltage Tester	1	**20.50**
SK-3986	Polarity Indicating Cap	10	**3.05**



RODALE BAKELITE NEON TATTELITE TESTER

Cat. No. 18

This tattelite will test any current from 110 volts to 550 volts. Most commonly used to test live and ground wires in circuit, short circuits, blown fuses, open circuits, static, polarity, etc.

10 testers mounted on display card.

Standard package, 10 cards. Weight, 6 pounds.

Price, No. **18** Tester.....each **$0.60**

FEDERAL NOARK SAFETY SWITCHES

TYPE A-HEAVY DUTY SAFETY SWITCHES SINGLE THROW



No. 81136

Front Operated Construction Features:

- Only 2 Pressure joints to each pole.
- New patented high pressure fuse holder.
- Three position front operated handle.
- Mufflers are Rolarc Arc Suppressors.
- Cover interlock.
- Individual pole block construction.
- Powerful Quick Make and Quick Break.
- General Purpose Enclosure NEMA Type 1.

FUSIBLE

230 Volts AC — 250 Volts DC

Cat. No.	Amps.	HP Rating 230V. A.C.	HP Rating 250V. D.C.	Poles	Wt. Lb. Each	List Price
•81322	30	2	5	2	9½	$23.26
•81332	30	3	....	3	10½	29.18
21342	30	3	....	4	16	40.60
•81622	60	5	10	2	23	30.72
•81632	60	7½	....	3	24	40.60
21642	60	10	....	4	22	49.38
•81122	100	10	15	2	26	48.28
•81132	100	15	....	3	28	62.56
21142	100	20	....	4	40	82.30
21222	200	15	30	2	64	79.02
21232	200	30	....	3	77	92.38
21242	200	30	....	4	93	145.96
21422	400	30	50	2	98	177.80
21432	400	50	....	3	106	203.04
21442	400	50	....	4	140	277.68
21722	600	....	....	2	190	286.46
21732	600	....	....	3	233	347.92
21742	600	....	....	4	250	478.52
†21822	800	....	....	2	287	435.72
†21832	800	....	....	3	300	593.78
†21842	800	....	....	4	392	896.70
†211222	1200	....	....	2	350	602.56
†211232	1200	....	....	3	383	760.60
†211242	1200	....	....	4	400	1096.46

†Arranged for two fuses and double solderless connectors per pole.

Switching Neutral: Fusible switches can be supplied with unfused switching neutral. Add "SWN" to regular catalog numbers. Prices are the same as for switches with all poles fusing.

•New Front Operated Construction.

NON-FUSIBLE

230 Volts AC — 250 Volts DC

Cat. No.	Amps.	HP Rating 230V. A.C.	HP Rating 250V. D.C.	Poles	Wt. Lb. Each	List Price
•83322	30	5	5	2	9	$21.90
•83332	30	7½	....	3	12	26.34
23342	30	10	....	4	18	38.40
•83622	60	10	10	2	22	29.18
•83632	60	15	....	3	23	38.40
23642	60	20	....	4	24	49.38
•83122	100	15	15	2	22	47.18
•83132	100	25	....	3	24	58.16
23142	100	30	....	4	39	88.90
23222	200	25	30	2	54	66.94
23232	200	40	....	3	60	75.72
23242	200	50	....	4	69	140.48

•New Front Operated Construction.

Non-Fusible switches, 400 to 1200 amp., see following table.

Discount Schedule "C"

FEDERAL NOARK SAFETY SWITCHES

TYPE A-HEAVY DUTY SAFETY SWITCHES SINGLE THROW

NON-FUSIBLE

230 Volts AC — 250 Volts DC

Cat. No.	Amps.	HP Rating 230V. A.C.	HP Rating 250V. D.C.	Poles	Wt. Lb. Each	List Price
23422	400	50	50	2	100	$124.02
23432	400	50	50	3	105	197.56
23442	400	50	....	4	115	256.84
23722	600	....	....	2	85	243.64
23732	600	....	....	3	171	317.18
23742	600	....	....	4	241	447.80
*23822	800	....	....	2	250	385.24
*23832	800	....	....	3	255	514.74
*23842	800	....	....	4	270	662.92
*231222	1200	....	....	2	300	525.72
*231232	1200	....	....	3	287	690.36
*231242	1200	....	....	4	300	907.68

*Arranged for double solderless connectors per pole.

FUSIBLE — SOLID NEUTRAL — INSULATED

125-250 or 230 Volts AC

3 Poles — Two Blades — Two Fuses

Cat. No.	Amps.	HP Rating 230V. A.C.	HP Rating 250V. D.C.	Poles	Wt. Lb. Each	List Price
•81332SN	30	3	5	3	10	$26.56
•81632SN	60	7½	10	3	20	35.12
•81132SN	100	15	15	3	27	55.96
21232SN	200	30	30	3	67	86.70
21432SN	400	50	50	3	101	197.56
21732SN	600	....	....	3	190	317.18
†21832SN	800	....	....	3	287	475.24
†211232SN	1200	....	....	3	350	672.80

4 Poles — Three Blades — Three Fuses

•81342SN	30	3	....	4	11	38.40
•81642SN	60	7½	....	4	24	48.28
•81142SN	100	15	....	4	28½	74.62
21242SN	200	30	....	4	77	109.74
21442SN	400	50	....	4	130	228.28
21742SN	600	....	....	4	233	380.86
†21842SN	800	....	....	4	300	852.80
†211242SN	1200	....	....	4	383	1047.06

5 Poles — Four Blades — Four Fuses

21352SN	30	3	....	5	16	47.18
21652SN	60	10	....	5	22	57.06
21152SN	100	20	....	5	40	96.58
21252SN	200	30	....	5	93	145.96
21452SN	400	50	....	5	140	306.18
21752SN	600	....	....	5	250	519.14
†21852SN	800	....	....	5	392	934.02
†211252SN	1200	....	....	5	400	1154.62

†Arranged for two fuses and double solderless connectors per pole.

•New Front Operated Construction.

Dust-tight Nema type 5 and Semi Dust-tight Nema type 1A switches can be supplied for side operated switches. Prices and delivery on request.

Discount Schedule "C"

FEDERAL NOARK SAFETY SWITCHES
TYPE A-HEAVY DUTY SAFETY SWITCHES
SINGLE THROW

Equipped with Rolarc Arc Suppressors



No. 21136

Milled Type Knife Blade Construction

Quick Make and Quick Break Interlocking Cover

Solderless Connectors. Silver plated fuse clips and switch contacts.

Standard Finish: Gray Enamel.

GENERAL PURPOSE ENCLOSURE
NEMA TYPE 1
FUSIBLE
575 Volts A.C. — 600 Volts D.C.

Cat. No.	Amps.	HP Rating 575V. A.C.	600V. D.C.	Poles	Wt. Lb. Each	List Price
•81326	30	5	7½	2	25	$38.40
•81336	30	7½	....	3	25	45.00
21346	30	7½	....	4	20	55.96
•81626	60	10	15	2	21	40.60
•81636	60	20	....	3	23	48.28
21646	60	20	....	4	24	60.36
•81126	100	15	25	2	26	62.56
•81136	100	30	....	3	28	71.34
21146	100	30	....	4	42	95.48
21226	200	25	50	2	75	93.28
21236	200	50	....	3	75	116.34
21246	200	50	....	4	90	160.24
21426	400	....	....	2	115	217.30
21436	400	....	....	3	140	237.06
21446	400	....	....	4	160	306.18
21726	600	....	....	2	200	345.72
21736	600	....	....	3	230	395.12
21746	600	....	....	4	260	498.28
†21826	800	....	....	2	290	533.40
†21836	800	....	....	3	340	690.36
†21846	800	....	....	4	440	914.26
†211226	1200	....	....	2	380	750.72
†211236	1200	....	....	3	530	907.80
†211246	1200	....	....	4	750	1281.94

NON-FUSIBLE

•83326	30	7½	7½	2	21	26.34
•83336	30	15	....	3	22	30.72
23346	30	15	....	4	18	38.40
•83626	60	15	15	2	21	34.02
•83636	60	25	....	3	22	38.40
23646	60	25	....	4	24	49.38
•83126	100	20	25	2	24	55.96
•83136	100	40	....	3	32	58.16
23146	100	40	....	4	39	88.90
23226	200	25	50	2	54	70.24
23236	200	50	....	3	60	75.72
23246	200	50	....	4	69	140.48
23426	400	....	....	2	78	177.80
23436	400	....	....	3	85	197.56
23446	400	....	....	4	115	256.84
23726	600	....	....	2	160	256.82
23736	600	....	....	3	180	317.18
23746	600	....	....	4	200	447.80
†23826	800	....	....	2	230	385.24
†23836	800	....	....	3	249	514.74
†23846	800	....	....	4	270	662.92
†231226	1200	....	....	2	272	525.72
†231236	1200	....	....	3	287	690.36
†231246	1200	....	....	4	300	907.68

†Arranged for double solderless connectors per pole.

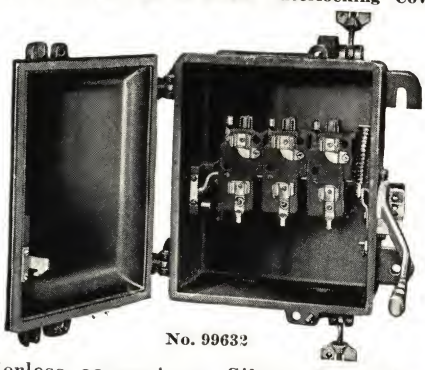
•New Front Operated Construction.

Discount Schedule "C"

FEDERAL NOARK SAFETY SWITCHES
WEATHERPROOF SAFETY SWITCHES
TYPE A DUALBREAK

Cast Iron or Aluminum Enclosures—Single Throw

Quick Make and Quick Break Interlocking Cover



No. 99632

Solderless connectors. Silver plated fuse clips and switch contacts.

Standard Finish: Gray Enamel.

NEMA TYPES 3 AND 5 ENCLOSURE
FUSIBLE
230 Volts AC——250 Volts DC

Cat. No.	Amps.	HP Rating 575V. A.C.	600V. D.C.	Poles	Wt. Lb. Each	List Price
99322	30	2	5	2	18¼	$86.70
99332	30	3	....	3	9½	96.58
99342	30	3	....	4	37	127.30
99622	60	5	10	2	37	92.18
99632	60	7½	....	3	38	106.46
99642	60	10	....	4	49	135.00
99122	100	10	15	2	52	238.16
99132	100	15	....	3	54	262.30
99142	100	20	....	4	100	321.58
99222	200	15	30	2	108	350.12
99232	200	30	....	3	114	376.46
99242	200	30	....	4	138	460.96
99422	400	30	50	2	348	711.20
99432	400	50	....	3	357	735.36

575 Volts AC — 600 Volts DC

Cat. No.	Amps.	HP Rating 230V. A.C.	250V. D.C.	Poles	Wt. Lb. Each	List Price
99326	30	....	7½	2	36¼	$107.56
99336	30	7½	....	3	37	117.42
99346	30	7½	....	4	47¾	160.24
99626	60	....	15	2	47½	115.24
99636	60	20	....	3	53½	127.30
99646	60	20	....	4	50	184.38
99126	100	....	25	2	96	255.72
99136	100	30	....	3	98	275.48
99146	100	30	....	4	100	335.84
99226	200	....	50	2	108	368.78
99236	200	50	....	3	114	385.24
99246	200	50	....	4	138	475.24
99426	400	....	....	2	360	735.36
99436	400	....	....	3	375	761.70

NON-FUSIBLE

Cat. No.	Amps.	HP Rating 230V AC	575V AC	250V DC	600V DC	Poles	Wt. Lb. Each	List Price
97326	30	3	....	5	7½	2	36	$87.80
97336	30	5	10	....	....	3	36¾	96.58
97346	30	5	10	....	....	4	47	106.46
97626	60	7½	....	10	15	2	37	93.28
97636	60	10	25	....	....	3	38	103.16
97646	60	15	25	....	....	4	50	131.70
97126	100	15	....	15	25	2	51½	241.46
97136	100	20	40	....	....	3	52½	256.82
97146	100	25	40	....	....	4	99	289.74
97226	200	25	....	30	50	2	107	333.64
97236	200	40	50	....	....	3	112½	350.12
97246	200	50	50	....	....	4	136	437.92
97426	400	....	....	....	....	2	360	675.00
97436	400	....	....	....	....	3	375	701.34

Discount Schedule "C"

FEDERAL NOARK SAFETY SWITCHES

TYPE A-DOUBLE THROW SWITCHES

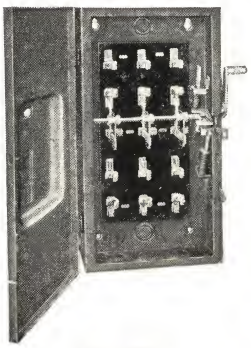
Milled Type Knife Blade Construction

Quick Make and Quick Break*—Interlocking Cover

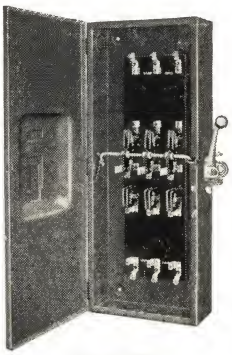
Ebony Base — Positive Pressure Fuse Clips

Silver Plated Fuse Clips and Switch Contacts

Standard Finish: Gray Enamel



No. 17632



No. 17136

GENERAL PURPOSE ENCLOSURE NEMA TYPE I

FUSIBLE

250 Volts DC — 230 Volts AC

Cat. No.	Amps.	Poles	Wt. Lb. Each	List Price
17322	30	2	18	$43.90
17332	30	3	21	48.28
17342	30	4	30	66.94
17622	60	2	24	79.02
17632	60	3	34	86.70
17642	60	4	54	106.46
17122	100	2	61	119.62
17132	100	3	90	144.86
17142	100	4	100	170.12
17222	200	2	102	166.84
17232	200	3	130	219.52
17242	200	4	159	277.68
17422	400	2	185	336.94
17432	400	3	250	463.16
17442	400	4	290	514.74
17722	600	2	288	420.36
17732	600	3	310	559.75
17742	600	4	400	662.92

600 Volts DC — 575 Volts AC

17326	30	2	21	88.90
17336	30	3	25	93.28
17346	30	4	34	141.58
17626	60	2	27	92.18
17636	60	3	37	96.58
17646	60	4	58	144.86
17126	100	2	65	159.14
17136	100	3	95	170.12
17146	100	4	105	251.34
17226	200	2	107	193.18
17236	200	3	140	255.72
17246	200	4	169	323.78
17426	400	2	210	363.28
17436	400	3	260	473.04
17446	400	4	310	557.56

*400 and 600 Amps., Quick Break only.

Discount Schedule "C"

FEDERAL NOARK SAFETY SWITCHES

TYPE A-DOUBLE THROW SWITCHES

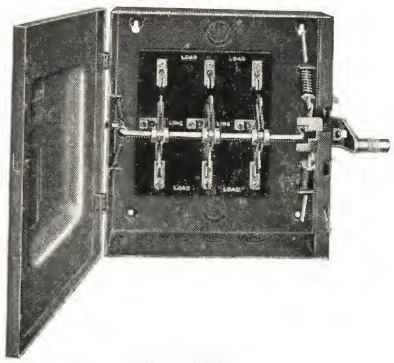
Milled Type Knife Blade Construction

Quick Make and Quick Break — Interlocking Cover

Ebony Base — Positive Pressure Fuse Clips

Silver Plated Fuse Clips and Switch Contacts

Standard Finish: Gray Enamel



No. 14132

GENERAL PURPOSE ENCLOSURE NEMA TYPE I

NON-FUSIBLE

250 Volts DC — 230 Volts AC

Cat. No.	Amps.	Poles	Wt. Lb. Each	List Price
14322	30	2	15	$26.56
14332	30	3	18	31.82
14342	30	4	22	47.20
14622	60	2	17	42.80
14632	60	3	21	48.28
14642	60	4	28	66.94
14122	100	2	39	62.56
14132	100	3	42	76.82
14142	100	4	46	136.08
14222	200	2	70	83.40
14232	200	3	67	120.72
14242	200	4	118	189.86
14422	400	2	130	237.06
14432	400	3	163	318.30
14442	400	4	195	426.94
14722	600	2	234	335.86
14732	600	3	280	442.32
14742	600	4	328	555.36

600 Volts DC — 575 Volts AC

14626	30–60	2	17	43.90
14636	30–60	3	21	51.58
14646	30–60	4	28	73.52
14126	100	2	39	69.14
14136	100	3	42	83.40
14146	100	4	46	155.84
14226	200	2	71	93.28
14236	200	3	98	129.52
14246	200	4	124	207.44
14426	400	2	112	266.70
14436	400	3	163	335.84
14446	400	4	195	465.36
14726	600	2	185	375.36
14736	600	3	230	486.22
14746	600	4	320	602.56

Discount Schedule "C"

FEDERAL NOARK SAFETY SWITCHES
TYPE C — 250 VOLTS — SINGLE THROW



No. 71332

GENERAL PURPOSE ENCLOSURE NEMA TYPE I

Switches in the 5100 and 5500 Series are Compact Type Construction

FUSIBLE
230 Volts AC — 250 Volts DC

Cat. No.	Amps.	HP Rating 230V. A.C.	HP Rating 250V. D.C.	Poles	Wt. Lb. Each	List Price
•71322	30	2	5	2	8	$13.16
•71332	30	3	....	3	12	15.92
11342	30	3	....	4	9½	30.72
•71622	60	5	10	2	20	23.38
•71632	60	7½	....	3	21	29.18
51642	60	10	....	4	15	42.80
•71122	100	10	15	2	22	37.30
•71132	100	15	....	3	27	45.00
51142	100	20	....	4	20	69.14
51222	200	15	30	2	43	55.96
51232	200	30	....	3	47	76.82
51242	200	30	....	4	55	124.02
11422	400	30	50	2	98	141.58
11432	400	50	....	3	106	161.34
11442	400	50	....	4	140	230.48
11722	600	....	....	2	190	277.68
11732	600	....	....	3	233	320.48
11742	600	....	....	4	250	423.64

FUSIBLE — SOLID NEUTRAL
125-250 DC or 230 Volts AC

3 Pole — Two Blades — Two Poles Fusible

Cat. No.	Amps.	HP Rating 230V. A.C.	HP Rating 250V. D.C.	Poles	Wt. Lb. Each	List Price
•71332SN	30	3	5	3	8½	$14.60
•71632SN	60	7½	10	3	20	24.80
•71132SN	100	15	15	3	24	38.40
51232SN	200	30	30	3	43	70.24
11432SN	400	50	50	3	101	154.74
11732SN	600	....	....	3	190	297.42

230 Volts AC

4 Pole — Three Blades — Three Poles Fusible

•71342SN	30	3	....	4	9½	20.46
•71642SN	60	7½	....	4	20	34.02
•71142SN	100	15	....	4	26	52.68
51242SN	200	30	....	4	47	92.18
11442SN	400	50	....	4	130	197.56
11742SN	600	....	....	4	233	353.40

115-230 Volts AC

5 Poles — Four Blades — Four Poles Fusible

11352SN	30	3	....	5	9½	34.02
51652SN	60	10	....	5	21	51.58
51152SN	100	20	....	5	20	91.08
51252SN	200	30	....	5	55	129.50
11452SN	400	50	....	5	140	297.42
11752SN	600	....	....	5	290	467.56

Switching Neutral—Fusible switches can be furnished with unfused switching neutral. Add "SWN" to regular catalog numbers. Prices are the same as for switches with all poles fusible and switching.

•New Front Operated Construction.

Discount Schedule "C"

FEDERAL NOARK SAFETY SWITCHES
TYPE C — 250 VOLTS — SINGLE THROW



Front Operated Construction Features:

Two Pressure joints to each pole.

New, patented High Pressure fuseholder.

Two position, front operated handle.

Individual Pole block construction.

Powerful Quick Make, Quick Break Mechanism.

Switches in the 55000 series are compact type construction.

General Purpose Enclosure NEMA Type I
NON-FUSIBLE
230 Volts AC — 250 Volts DC

Cat. No.	Amps.	HP Rating 230V. A.C.	HP Rating 250V. D.C.	Poles	Wt. Lb. Each	List Price
•73322	30	5	5	2	7½	$11.68
•73332	30	7½	....	3	8½	14.60
13342	30	10	....	4	9½	26.34
•73622	60	10	10	2	20	20.46
•73632	60	15	....	3	18	26.34
55642	60	20	....	4	14	35.12
•73122	100	15	20	2	20	35.12
•73132	100	25	....	3	22	39.50
55142	100	25	....	4	21	66.94
55222	200	30	40	2	36	47.18
55232	200	50	....	3	38	63.64
55242	200	50	....	4	43	117.42
13422	400	50	50	2	69	117.42
13432	400	50	....	3	100	141.58
13442	400	50	....	4	140	200.84
13722	600	....	....	2	160	219.50
13732	600	....	....	3	171	287.56
13742	600	....	....	4	194	350.12

•New Front Operated Construction.

Switching Neutral—Fusible switches can be furnished with unfused switching neutral. Add "SWN" to regular catalog numbers. Prices are the same as for switches with all poles fusible and switching.

TYPE C — 600 VOLTS — SINGLE THROW
Knifeblade Rolarc Construction
General Purpose Enclosure NEMA Type I
FUSIBLE

Cat. No.	Amps.	HP Rating 230V. A.C.	HP Rating 250V. D.C.	Poles	Wt. Lb. Each	List Price
•71336	30	7½	....	3	24	$27.78
11346	30	7½	....	4	23	45.00
•71636	60	20	....	3	24	34.02
11646	60	20	....	4	23	51.58
•71136	100	30	....	3	28	61.46
11146	100	30	....	4	51	92.18
11236	200	50	....	3	78	92.18
11246	200	50	....	4	90	148.16

NON-FUSIBLE

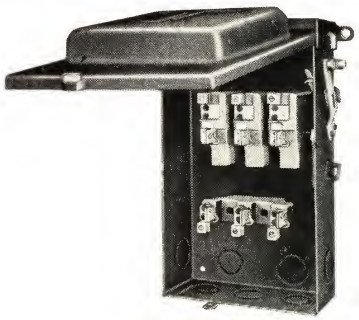
•73336	30	15	....	3	20	20.46
13346	30	15	....	4	14	31.82
•73636	60	25	....	3	20	27.78
13646	60	25	....	4	14	45.00
•73136	100	40	....	3	22½	51.58
13146	100	40	....	4	32	83.40
13236	200	50	....	3	61	70.24
13246	200	50	....	4	61	119.62

•New Front Operated Construction.

Discount Schedule "C"

FEDERAL NOARK SAFETY SWITCHES

TYPE C — 250 VOLTS — SINGLE THROW RAINTIGHT ENCLOSURE — NEMA TYPE 3



No. R51132

FUSIBLE

230 Volts AC — 250 Volts DC

Cat. No.	Amps.	HP Rating 230V. A.C.	250V. D.C.	Poles	Wt. Lb. Each	List Price
R11322	30	2	5	2	5	$23.38
R11332	30	3	....	3	7½	29.18
R11342	30	3	....	4	10	38.40
R51622	60	5	10	2	8	43.90
R51632	60	7½	....	3	14½	47.18
R51642	60	10	....	4	14	55.96
R51122	100	10	15	2	19	58.16
R51132	100	15	....	3	22	68.04
R51142	100	20	....	4	24	87.80
R51222	200	15	30	2	44	82.30
R51232	200	30	....	3	48	91.08
R51242	200	30	....	4	56	135.00

FUSIBLE — SOLID NEUTRAL

125-250 DC or 230 Volts AC

Cat. No.	Amps.	230V. A.C.	250V. D.C.	Poles	Wt. Lb. Each	List Price
	3 Pole — Two Blades — Two Poles Fusible					
R11332SN	30	3	5	3	5½	$24.78
R51632SN	60	7½	10	3	13	45.00
R51132SN	100	15	15	3	20	61.46
R51232SN	200	30	30	3	44	84.50

230 Volts AC

	4 Pole — Three Blades — Three Poles Fusible					
R11342SN	30	3	....	4	7	37.30
R51642SN	60	7½	....	4	17	55.96
R51142SN	100	15	....	4	22	82.30
R51242SN	200	30	....	4	48	116.34

115-230 Volts AC

	5 Pole — Four Blades — Four Poles Fusible					
R11352SN	30	3	....	5	10	47.18
R51652SN	60	10	....	5	21	70.24
R51152SN	100	20	....	5	24	97.68
R51252SN	200	30	....	5	56	140.48

NON-FUSIBLE

230 Volts AC — 250 Volts DC

Cat. No.	Amps.	230V. A.C.	250V. D.C.	Poles	Wt. Lb. Each	List Price
R13322	30	5	5	2	5	$21.90
R13332	30	7½	....	3	6	27.78
R13342	30	10	....	4	10	37.30
R55622	60	10	10	2	8	40.60
R55632	60	15	....	3	10	45.00
R55642	60	20	....	4	15	51.58
R55122	100	15	20	2	18	52.68
R55132	100	20	....	3	19	62.56
R55142	100	25	....	4	24	83.40
R55222	200	30	40	2	36	79.02
R55232	200	40	....	3	40	87.80
R55242	200	50	....	4	46	128.40

Switching Neutral: Fusible switches can be furnished with unfused switching neutral. Add "SWN" to regular catalog numbers. Prices are the same as for switches with all poles fusible and switching

Discount Schedule "C"

FEDERAL NOARK SAFETY SWITCHES



No. 31242SN

TYPE D QUICK BREAK SINGLE THROW

Solderless Connectors
Standard Finish: Gray Enamel

SOLID NEUTRAL

125-250 or 230 Volts AC

Cat. No.	Amps.	Poles	Wt. Lb. Each	List Price
	3 Poles — Two Blades — Two Poles Fusible			
‡31332SN	30	3	4¾	$5.95
31632SN	60	3	8	10.00
31132SN	100	3	18	23.80
31232SN	200	3	38	51.90

230 Volts AC

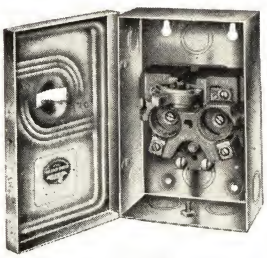
	4 Poles — 3 Blades — Three Poles Fusible			
‡31342SN	30	4	5¾	11.90
31642SN	60	4	10	23.80
31142SN	100	4	19	38.90
31242SN	200	4	40	70.25

115-230 Volts AC

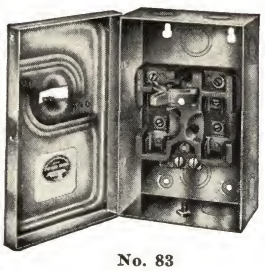
	5 Pole — 4 Blades — Four Poles Fusible			
‡31352SN	30	5	9½	19.95
31652SN	60	5	12	35.00
31152SN	100	5	24	68.00
31252SN	200	5	46	113.00

‡Not Quick Break.

TYPE D PONY SWITCHES



No. 73



No. 83

FUSIBLE

Cat. No.	Amps.	Volts	Switch Poles	Switch Blades	Buses	Wt.Lb. Each	List Price
‡71	30	125	2SN	1	1-Plug	2	$3.60
*74	30	125	2SN	1	1-Plug	2	4.45
72	30	125–250	2	2	2-Plug	2¾	4.25
*75	30	125–250	2	2	2-Plug	2¾	5.15
‡73	30	125–250	3SN	2	2-Plug	2¾	4.70
‡*76	30	125–250	3SN	2	2-Plug	2¾	5.55
‡81	30	125	2SN	1	1-NEC	2½	5.35
82	30	250	2	2	2-NEC	2¾	5.35
‡83	30	125–250	3SN	2	2-NEC	2¾	6.65
84	60	125	2SN	1	1-NEC	5¾	12.65
85	60	250	2	2	2-NEC	6	13.30
▲86	60	125–250 or 230 AC	3SN	2	2-NEC	6	13.30

NON-FUSIBLE

70	30	250	2	2	None	2¾	4.00
‡80	60	250	2	2	None	5¾	12.00

*With Dead Front Plate.

‡Insulated Groundable Solid Neutral.

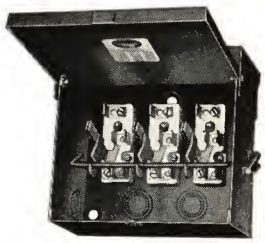
▲Two Neutrals (one grounded and one insulated).

FEDERAL NOARK SAFETY SWITCHES

TYPE D—RAINTIGHT CABINETS

Galvanized Steel

Fusible—Single Throw—Solderless Connectors



No. R31332

30 Ampere Switches Not Quick Break

Cat. No.	Volts	Poles	Fuses	Switch Blades	Neut.	List Price
30 Ampere Switches						
R30321SN	125	2	1 Plug	1	Solid	$7.65
R30322	125–250	2	2 Plug	2	.....	8.25
R30332SN	125–250	3	2 Plug	2	Solid	8.85
R30332	115	3	3 Plug	3	.....	14.70
R31322	250	2	2 NEC	2	.....	8.85
R31332SN	125–250 or 230VAC	3	2 NEC	2	Solid	10.50
R31332	230	3	3 NEC	3	.....	15.65
R31342SN	115–230	4	3 NEC	3	Solid	20.70
R31342	230	4	4 NEC	4	.....	24.00
R31352SN	115–230	5	4 NEC	4	Solid	28.00
60 Ampere Switches						
R31622	250	2	2 NEC	2	.....	19.95
R31632SN	120–250 or 230VAC	3	2 NEC	2	Solid	19.60
R31632	230	3	3 NEC	3	.....	20.00
R31642SN	115–230	4	3 NEC	3	Solid	26.60
R31642	230	4	4 NEC	4	.....	36.00
R31652SN	115–230	5	4 NEC	4	Solid	47.00
100 Ampere Switches						
R31122	250	2	2 NEC	2	.....	34.40
R31132SN	125–250 or 230VAC	3	2 NEC	2	Solid	34.60
R31132	230	3	3 NEC	3	.....	38.90
R31142SN	115–230	4	3 NEC	3	Solid	53.00
R31142	230	4	4 NEC	4	.....	77.00
R31152SN	115–230	5	4 NEC	4	Solid	89.00
200 Ampere Switches						
R31222	250	2	2 NEC	2	.....	61.00
R31232SN	125–250 or 230VAC	3	2 NEC	2	Solid	63.75
R31232	230	3	3 NEC	3	.....	69.20
R31242SN	115–230	4	3 NEC	3	Solid	87.00
R31242	230	4	4 NEC	4	.....	128.00
R31252SN	115–230	5	4 NEC	4	Solid	141.00

CONDUIT HUBS AND NIPPLES FOR RAINTIGHT SWITCHES

Size In.	Location	Type	Prefix to Cat. No.	Add to List Price
¾	1 Top	Hub	C	$2.00
1	1 Top	Hub	D	2.00
1¼	1 Top	Hub	E	2.00
1½	1 Top	Hub	G	3.20
2	1 Top	Hub	H	3.20
¾	2 Top	Hub	P	4.00
1	2 Top	Hub	Q	4.00
1¼	2 Top	Hub	T	4.00
¾	1 Top 1 Bottom	Hub	J	4.00
1	1 Top 1 Bottom	Hub	K	4.00
1¼	1 Top 1 Bottom	Hub	L	4.00
1	1 Top	*Nipple	DD	2.00
1¼	1 Top	*Nipple	EE	2.00
1½	1 Top	*Nipple	GG	3.20
2	1 Top	*Nipple	HH	3.20

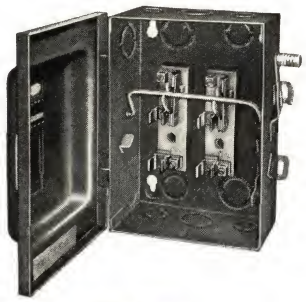
*Standard nipples 1⅝ inches long.

FEDERAL NOARK SAFETY SWITCHES

TYPE D — QUICK BREAK — SINGLE THROW

Solderless Connectors

Standard Finish: Gray Enamel



No. 31622

FUSIBLE — CARTRIDGE FUSES

General Purpose Enclosure—NEMA TYPE 1

230 Volts AC — 250 Volts DC

Cat. No.	Amps.	Poles	Wt. Lb. Each	List Price
‡31322	30	2	4½	$4.75
‡31332	30	3	5	8.90
‡31342	30	4	7	12.95
31622	60	2	8	10.10
31632	60	3	9½	14.05
31642	60	4	12	24.85
31122	100	2	18	22.70
31132	100	3	19	25.95
31142	100	4	20	63.00
31222	200	2	43	42.15
31232	200	3	47	57.30
31242	200	4	55	113.00

Switching Neutral: Cartridge type fusible switches can be furnished with unfused switching neutral. Add "SWN" to regular catalog numbers. Prices are the same as for switches with all poles fusible and switching.

‡Not Quick Break.

NON-FUSIBLE

230 Volts AC — 250 Volts DC

Cat. No.	Amps.	Poles	Wt. Lb. Each	List Price
‡35322	30	2	4½	$4.00
‡35332	30	3	5	7.30
‡35342	30	4	9	13.30
35622	60	2	8	12.00
35632	60	3	9	14.50
35642	60	4	12	25.30
35122	100	2	15	24.20
35132	100	3	18	26.60
35142	100	4	21	61.00
35222	200	2	36	35.00
35232	200	3	38	47.00
35242	200	4	43	107.00

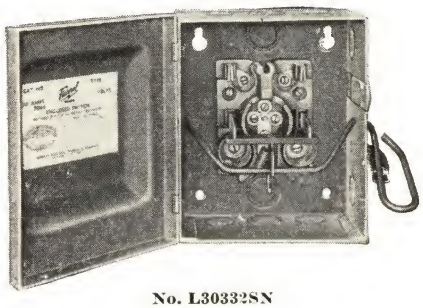
‡Not Quick Break.

FEDERAL NOARK SAFETY SWITCHES

TYPE D — SINGLE THROW

Solderless Connectors

Standard Finish: Gray Enamel



No. L30332SN

FUSIBLE — PLUG FUSES

30 Amp. — Not Quick Break

Cat. No.	Volts	Poles	Fuses	Wt. Lbs. Each	List Price
*30321SN	125	2	1	4½	$3.20
†*L30321SN	125	2	1	3¼	3.20
30322	125–250	2	2	4	3.80
†L30322	125–250	2	2	4	3.80
*30332SN	125–250	3	2	2¾	4.15
†*L30332SN	125–250	3	2	4	4.15
30332	115	3	3	5	7.15

†Open knifeblade construction.

With Dead Frontplate

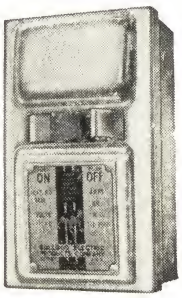
*D30321SN	125	2	1	4	5.50
D30322	125–250	2	2	4	5.80
*D30332SN	125–250	3	2	4	6.50

*Insulated groundable solid neutral.

IN THIS CATALOG IT IS IMPOSSIBLE TO INCLUDE EVERYTHING WE CARRY — ADVISE US OF YOUR ADDITIONAL ELECTRICAL REQUIREMENTS.

BULLDOG FRONT OPERATED SAFETY SWITCHES

ROCKER TYPE SWITCH—30 AMPERE



Molded plastic handles. Strong, ribbed design—a protection against accidental operation or breakage. Provision for circuit name cards on handle—provide quick and positive identification.

Full floating contacts. Integral with switch handles — positive action. Wiping action assures clean contact surfaces.

Double break to reduce arcing. Frictionless knife-edge bearings require no lubrication. Positive propelling snap-action—dependable operation.

Cabinets small enough to be practical in limited areas — but large enough to provide generous wiring space. Ample number of knockouts provided to meet any wiring need. Gray enamel finish inside and out — for finer appearance.

Applications

Oil burners, pumps, refrigeration equipment, air conditioning units, printing presses, drill presses and other driven equipment.

Also suitable for use as Service Equipment.

Box Dimensions (O.D.): 7½ inches high, 4½ inches wide, 3½ inches deep, including handle.

Conduit Knockouts: Top—One ½-¾-1; two ½; Bottom—One ½-¾-1, two ½; Back—One ½-¾-1, one ½; Each Side—One ½-¾, one ½.

Fusible

Cat. No.	Poles	Blades	Fuse Conn's.	Carton	Wt. Lbs. Each	List Price
1 HP-115 AC, 2 HP-125 DC and 125-250						
83211*	2	2	2 Plug	5	4	$4.00
2 HP-230 AC and 2 HP-250 DC						
83221	2	2	2 Cart.	5	4	4.00

***Insulated Solid Neutral**

1 HP-115 AC, 1 Ph. and 1½ HP-125 DC						
84211	2	1	1 Plug	5	4	3.00
1 HP-115 AC, 1 Ph., 2 HP-125 DC and 125-250						
84311	3	2	2 Plug	5	4	5.00
2 HP-230 AC, 3 Phase						
84321	3	2	2 Cart.	5	4	5.00

* Equipped with separate box grounding screw.

BULLDOG MASTER SAFETY SWITCHES

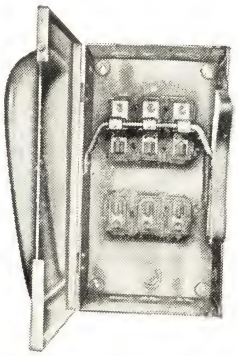
BullDog Vacu-Break Type

(For A, C and D Applications)

SINGLE THROW—FUSIBLE GRAY FINISH VOIDABLE COVER INTERLOCK



30 A. to 200 A. switches are front operated.



100 Amp. Fusible Type with cabinet open.



400 A. and 600 A. switches are side operated.

Listed by Underwriters as "Enclosed Switches" (also "Suitable for use as Service Entrance Equipment") under File E4776.

Wiring Terminals are BullDog Solderless Wire Grips; one per pole on 30 to 400 ampere sizes. Two Wire Grips per pole (for 500 MCM cable each) and 600 and 800 ampere and 4 per pole on 1200 ampere; both line and Load.

The higher conditional Hp ratings are applicable only when appropriate dual element fuses for the starting characteristics of the motor are used as provided in paragraph 4346 of the National Electrical Code.

For maximum switch performance use only fuses having lowest possible operating temperatures. Switches NF-351, SN-321 and F-321 are packaged and shipped 5 to a corton.

FUSIBLE—230 VOLTS—SINGLE THROW

***2 Pole, 2 Blade, 2 Fuse—230 V. AC; 250 V. DC**

Amp.	H.P. Rating 230 V. AC Standard	230 V. AC Conditional	250 V. DC Standard	250 V. DC Conditional	Cat. No.	Wt. Lbs. Each	Price Each
30	2	5	5	....	SN-321	8	$12.00
60	5	10	10	....	SN-322	16	20.50
100	10	15	15	20	SN-323	36	32.00
200	15	30	30	40	SN-324	45	58.00
400	30	....	50	....	SN-325	142	127.00
600	....	....	....	....	SN-326	178	246.00
	3 Pole, 3 Blade, 3 Fuse 230 V. AC						
30	3	10	....	....	F-321	8	13.50
60	7½	20	....	....	F-322	15	24.00
100	15	30	....	....	F-323	38	37.00
200	30	50	....	....	F-324	48	64.00
400	50	....	....	....	F-325	153	134.00
600	....	....	....	....	F-326	185	265.00
800	....	....	....	....	F-327	370	492.00
1200	....	....	....	....	F-328	381	630.00
	4 Pole, 4 Blades, 4 Fuse 230 V. AC						
30	3	10	....	....	F-421	19	26.00
60	10	20	....	....	F-422	20	37.00
100	20	30	....	....	F-423	46	60.00
200	30	50	....	....	F-424	55	108.00
400	50	....	....	....	F-425	192	200.00
600	....	....	....	....	F-426	231	367.00

*For 2 pole applications, 3 pole switches may be used by wiring two fused poles only and ignoring the third fusible pole.

FUSIBLE—230 VOLTS—SINGLE THROW SOLID NEUTRAL TYPE

2 Pole, 2 Blade, 2 Fuse 125/250 V.; 230 V. AC 3 Phase

Amp.	H.P. Rating 230 V. AC Standard	230 V. AC Conditional	250 V. DC Standard	250 V. DC Conditional	Cat. No.	Wt. Lbs. Each	Price Each
30	3	7½	....	....	SN-321	8	$12.00
60	7½	15	....	....	SN-322	16	20.50
100	15	30	....	....	SN-323	36	32.00
200	30	50	....	....	SN-324	45	58.00
400	50	....	....	....	SN-325	142	127.00
600	....	....	....	....	SN-326	178	246.00
	4 Pole, 3 Blade, 3 Fuse 230 V. AC						
30	3	7½	....	....	SN-421	19	17.00
60	7½	15	....	....	SN-422	19	28.00
100	15	30	....	....	SN-423	44	44.00
200	30	50	....	....	SN-424	51	76.00
400	50	....	....	....	SN-425	180	164.00
600	....	....	....	....	SN-426	223	293.00

575 VOLTS FUSIBLE—SINGLE THROW

***2 Pole, 2 Blade, 2 Fuse 575 V. AC**

Amps.	Horse Power Rating Std.	Conditional	Cat. No.	Wt. Lbs. Each	Price Each
30	5	10	F-351	11	$23.00
60	10	25	F-352	18	28.00
100	15	40	F-353	38	51.00
200	30	50	F-354	49	76.00
400	....	....	F-355	154	196.00
600	....	....	F-356	186	327.00
	3 Pole, 3 Blades, 3 Fuse 575 V. AC				
30	7½	20	F-351	11	23.00
60	20	50	F-352	18	28.00
100	30	50	F-353	38	51.00
200	50	....	F-354	49	76.00
400	....	....	F-355	154	196.00
600	....	....	F-356	186	327.00
800	....	....	F-357	370	572.00
1200	....	....	F-358	410	752.00

NOT FUSIBLE—SINGLE THROW

3 Pole 230 V. AC or 575 V. AC

Amps.	H.P. Rating 230 V. AC	575 V. AC	Cat. No.	Wt. Lbs. Each	Price Each
30	7½	20	NF-351	7	$12.10
60	15	50	NF-352	15	22.00
100	30	50	NF-353	34	33.00
200	50	50	NF-354	42	53.00

*For 2 pole applications, 3 pole switches may be used by wiring two fused poles only and ignoring the third fusible pole.

MICRO PRECISION SNAP-ACTION SWITCHES

1ML1 MICRO-LIMIT SWITCH

20 Amp., 110, 220 or 440 Volts A.C.



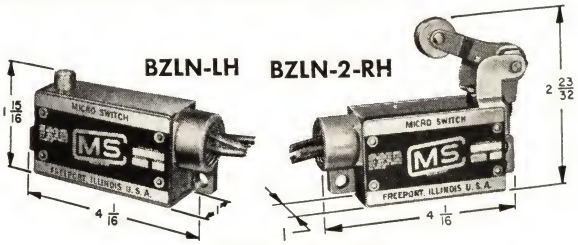
The 1ML1 is a heavy duty precision single-pole, double-throw limit switch with many desirable adjustability features that make it especially suited for industrial equipment. The operating head adjusts to four positions, the roller arm actuator can be positively locked in any of 870 positions in 360 degrees, and the actuator arm can be set to operate clockwise, counter-clockwise, or in both directions.

CHARACTERISTICS

O.F.—Operating Force
R.F.—Release Force
P.T.—Pretravel
O.T.—Overtravel
D.T.—Differential Travel
O.L.—Overforce Limit

TYPE "LN" LIMIT SWITCHES

Type "LN" and "LN-2" switches are for severe service. Sealed against dust, dirt, and the splash of liquids. Right- or left-hand designs. Single pole, double-throw. 15 Amperes, 125 or 250 V.

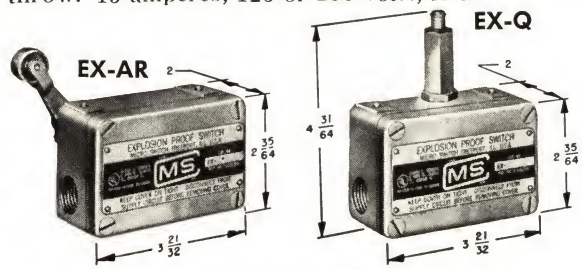


CHARACTERISTICS

BZLN-LH		BZLN—2RH	
O.F.	5 lb., max.	O.F.	3 lb., max.
R.F.	1 lb., min.	R.F.	1/4 lb., min.
P.T.	.008 to .020 in.	P.T.	5/64 in., max.
O.T.	13/64 in., min.	O.T.	15/32 in., min.
D.T.	.004 in., max.	D.T.	.014 in., max.

EXPLOSION-PROOF SWITCHES

These are the smallest explosion-proof switches available. Listed by Underwriters' for use in hazardous atmospheres, Class I, Groups C and D and Class II, Groups F and G. Single-pole, double-throw. 15 amperes, 125 or 250 volts, A-C.



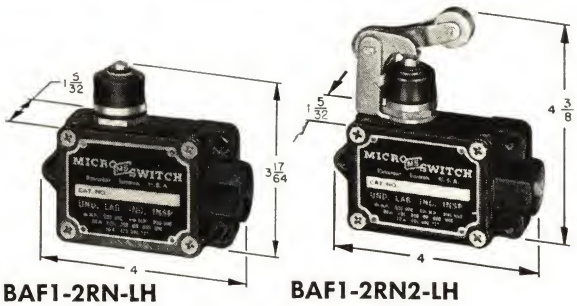
CHARACTERISTICS

EX-AR		EX-Q	
O.F.	1/2 to 1 1/4 lb.	O.F.	3 lb., max.
R.F.	1/4 lb. min.	R.F.	3/4 lb., min.
P.T.	7/32 in., max.	P.T.	5/64 in., max.
O.T.	not over 90°	O.T.	3/16 in., max.
D.T.	.007 in., max.	D.T.	.004 in., max.

MICRO PRECISION SNAP-ACTION SWITCHES

HIGH CAPACITY ENCLOSED SWITCHES

These compact, easy to mount sealed switches combine a reliable long life with the ability to handle a high inrush capacity, having a steady state current rating of 20 amperes, and inrush capacity of 75 amperes at voltages up to 460 volts, a-c. Single-pole, double-throw contact arrangement. Available in right- or left-hand designs.



CHARACTERISTICS

BAF1-2RN-LH & BAF1-2RN-RH		BAF1-2RN2-LH & BAF1-2RN2-RH	
O.F.	2 1/2 lb., max.	O.F.	2 lb., max.
R.F.	1 1/2 lb., min.	R.F.	1/2 lb., min.
P.T.	3/32 in., max.	P.T.	7/32 in., max.
O.T.	7/32 in., min.	O.T.	1/4 in., min.
D.T.	.0075 in., max.	D.T.	.015 in., max.

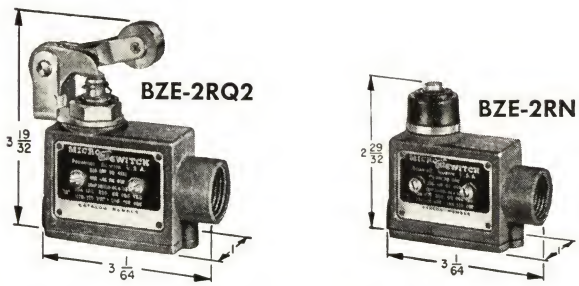
DIE CAST ENCLOSED SWITCHES

These are single-pole, double-throw switches in rugged die-cast aluminum housings, and available in a variety of actuators and a choice of side mounting or bottom mounting designs. The enclosures also provide protection, means of mounting and means of conduit attachment.

Switches with plunger actuators are suited for applications where the actuating motion is in line with plunger motion.

Roller arm actuators are designed for cam or slide actuation. Roller arm is adjustable vertically to any position in intervals of 1/5th of a degree through 225 degrees, and horizontally to any of eight positions in 360 degrees.

Roller plunger actuators are adjustable to two positions whose axes are 90 degrees apart. Switches with sealed plunger actuators are designed for locations exposed to dirt, dust, and the splash of liquids. Rating—15 amperes, 125 or 250 volts, A-C.



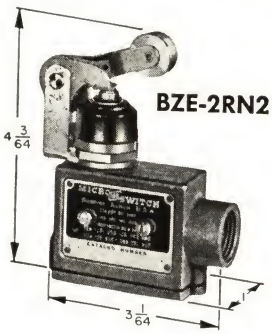
CHARACTERISTICS

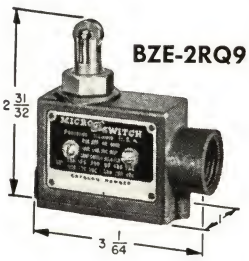
BZE-2RQ2 & BZV-2ZV-2RQ2		BZE-2RN & BZV-2RN	
O.F.	10 to 18 oz.	O.F.	9 to 24 oz.
R.F.	6 oz., min.	R.F.	4 oz., min.
P.T.	9/64 in., max.	P.T.	5/64 in., max.
O.T.	1.4 in., min.	O.T.	7/32 in., min.
D.T.	.006 in., max.	D.T.	.006 in., max.

MICRO PRECISION SNAP-ACTION SWITCHES

DIE CAST ENCLOSED SWITCHES

(Continued)





CHARACTERISTICS

BZE-2RN2 & BZV-2RN2		BZE-2RQ9 & BZV-2RQ9	
O.F.	6 to 16 oz.	O.F.	9 to 13 oz.
R.F.	4 oz., min.	R.F.	4 oz., min.
P.T.	11/64 in., max.	P.T.	1/64 in., max.
O.T.	7/32 in., min.	O.T.	9/64 in., min.
D.T.	.006 in., max.	D.T.	.002 in. max.

BASIC SWITCHES

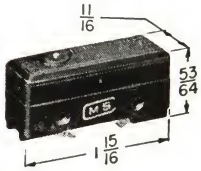
In MICRO basic switches the switching mechanism is enclosed within a precisely molded case of electrically resistant plastic. These small switches are well known for their precision, compactness, light weight, accurate repeatability, high electrical capacity and long trouble-free life.

These basic switches are available in a wide variety of integral actuators to adapt them to any type of actuating motion. Basic switches are available with either solder or screw type terminals.

Contact arrangement of these basic switches is single-pole, double-throw which can also be used as normally-open or normally-closed switches.

Electrical rating of basic switches is 15 amperes, 125 or 250 volts, a-c.

BZ-2R

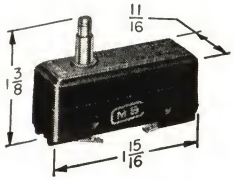


BZ-2R BASIC SWITCH

Characteristics

O.F.....9 to 13 oz.
R.F.....4 oz., min.
P.T.....1/64 in., max.
O.T.....005 in. min.
D.T.....0004 to .002 in.

BZ-2RS

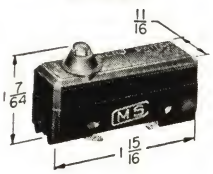


BZ-2RS BASIC SWITCH

Characteristics

O.F.....9 to 13 oz.
R.F.....4 oz., min.
P.T.....1/64 in., max.
O.T.....1/16 in., min.
D.T.....0004 to .002 in.

BZ-2RD



BZ-2RD BASIC SWITCH

Characteristics

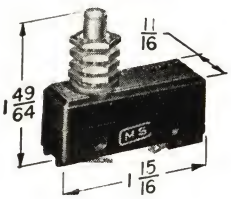
O.F.....9 to 13 oz.
R.F.....4 oz., min.
P.T.....1/64 in., max.
O.T.....1/16 in., min.
D.T.....0004 to .002 in.

MICRO PRECISION SNAP-ACTION SWITCHES

BASIC SWITCHES

(Continued)

BZ-2RQ1

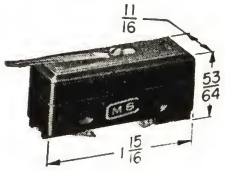


BZ-2RQ1 BASIC SWITCH

Characteristics

O.F.....9 to 13 oz.
R.F.....4 oz., min.
P.T.....1/64 in., max.
O.T.....7/32 in., min.
D.T.....0004 to .002 in.

BZ-2RL

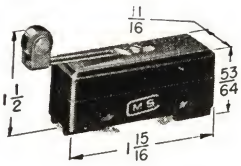


BZ-2RL BASIC SWITCH

Characteristics

O.F.....5 oz., max.
R.F.....1/2 oz., min.
P.T.....5/32 in., max.
O.T.....not over 1/16 in.
D.T.....050 in., max.

BZ-2RL2

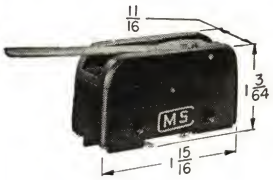


BZ-2RL2 BASIC SWITCH

Characteristics

O.F.....5 oz., max.
R.F.....1/2 oz., min.
P.T.....5/32 in., max.
O.T.....not over 1/16 in.
D.T.....050 in., max.

BZ-2RW

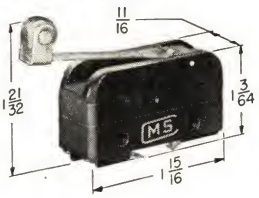


BZ-2RW BASIC SWITCH

Characteristics

O.F.....1 to 2½ oz.
R.F.....1/2 oz., min.
P.T.....11/32±1/16 in.
O.T.....3/16 in., min.
D.T.....016 to .078 in.

BZ-2RW2

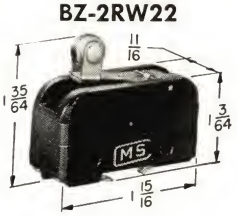


BZ-2RW2 BASIC SWITCH

Characteristics

O.F.....1 to 3½ oz.
R.F.....3/4 oz., min.
P.T.....1/4±1/16 in.
O.T.....9/64 in., min.
D.T.....012 to .062 in.

BZ-2RW22



BZ-2RW22 BASIC SWITCH

Characteristics

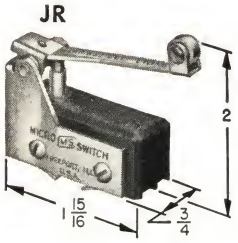
O.F.....2½ to 6½ oz.
R.F.....1¼ oz., min.
P.T.....1/8±3/64 in.
O.T.....3/32 in., min.
D.T.....006 to .031 in.

MICRO PRECISION SNAP-ACTION SWITCHES

ACTUATORS

Auxiliary actuators provide basic switches with added protection, auxiliary mounting facility, and adapt switches to unusual operation motions. Actuators are sold separately from basic switches. Type "JR" is used with Type "S" plunger basic switches. Types "A" and "M" are for use with "Pin" plunger basic switches.

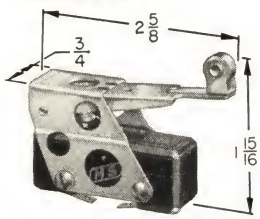
JR



JR ACTUATOR
Characteristics with BZ-2RS Basic Switch

O.F. ..... 3 oz., max.
R.F. ..... 1/2 oz., min.
P.T. ..... 5/32 in., max.
O.T. ..... 7/16 in., min.
D.T. ..... .020 in., max.

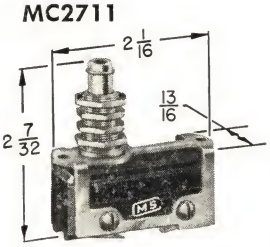
AD5721R



AD5721R ACTUATOR
Characteristics with BZ-2R Basic Switch

O.F. ..... 13 oz., max.
R.F. ..... 4 oz., min.
P.T. ..... 7/32 in., app.
O.T. ..... 17/32 in., app.
D.T. ..... .015 in., max.

MC2711



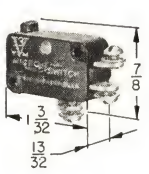
MC2711 ACTUATOR
Characteristics with BZ-2R Basic Switch

O.F. ..... 9 to 15 oz.
R.F. ..... 4 oz., min.
P.T. ..... .020 in., max.
O.T. ..... 3/16 in., min.
D.T. ..... .002 in., max.
O.L. ..... 5 lb.

V3-1 SWITCH

V3-1 is a smaller single-pole, double-throw basic switch particularly suited for applications where only a limited space is available. Electrical rating is 10 amperes, 125 or 250 volts, a-c. Auxiliary Actuators and housings for this switch are available.

V3-1



Characteristics

O.F. ..... 6 to 14 oz.
R.F. ..... 4 oz., min.
P.T. ..... 3/64 in., max.
O.T. ..... 1/32 in., max.
D.T. ..... .006 to .016 in.

SANGAMO TIME SWITCHES

TYPE S TIME SWITCH

External Manual Operation



Type S Time Switch

Small and attractive, yet accurate and rugged, the Type S Time Switch represents a modern adaptation of a tried and proven design. Available in two types: Type S with one "on" and one "off" operation; Type SR with two "on" and two "off" operations.

Synchronous and self-starting, low-speed 450 r.p.m. motor. The single pole, single throw, conservatively rated 15 amp. A.C. pure silver contacts are operated by a patented lever action, providing quick-break.

Approximate dimensions: 3 inches wide, 5⅜ inches high, 3 inches deep. Colors: Brown or Ivory.

Type	Number of Operations	Price Each—Brown	Price Each—Ivory
S	One "On" and one "Off"	$13.70	$13.95
SR	Two "On" and two "Off"	13.95	14.25
SJ‡	One "On" and one "Off"	.....	15.90

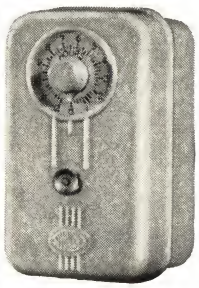
Standard Motors: 120 volt, 60 cycle. Special Motors: 24 or 240 volt, add **$1.10**; 25 or 50 cycle, add **$1.10**.

‡The S switch with plug-in cord and built-in receptacle for portable convenience; rated at 10 amp. or ¼ HP., 120 volt, 60 cycle A.C. only. Available in ivory only.

Specify color and type when ordering.

SANGAMO TIMERS

TYPES T AND TJ TIMERS—SYNCHRONOUS



Type T



Type TJ

Interval timer for control of attic fans, unit heaters, air conditioners and other appliances.

Sangamo synchronous, self-starting, slow speed 450 R.P.M. motor. Precision machined gears.

Types T-12H and TJ-12H timers provide an automatic OFF operation following a manually-set ON period of from 15 minutes to 12 hours. T-30M and TJ-30M have an ON period of from 1 to 30 minutes. Two mounting designs are available: Type T for switchbox or wall installation. TJ with plug-in cord and built-in receptacle for portable use. Both types to be operated in an upright position. Contacts are single pole single throw, normally open. T rated at 15 amperes AC; TJ rated at 10 amperes or ¼ HP AC. Overall dimensions: height 5⅜ inches, width 3 inches, depth 3¼ inches.

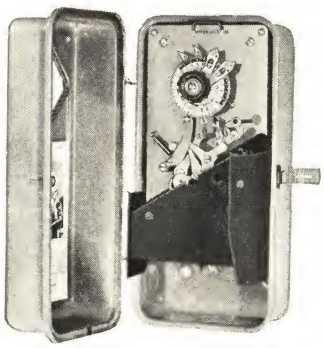
Type	Interval	AC Rating	Shpg. Wt. Lbs.	Price Each
T-12H	15 min. to 12 hrs.	15 amp.	2	**$13.70***
T-30M	1 min. to 30 min.	15 amp.	2	**13.70***
TJ-12H	15 min. to 12 hrs.	10 amp. or ¼ HP	2¼	**15.90†**
TJ-30M	1 min. to 30 min.	10 amp. or ¼ HP	2¼	**15.90†**

*Standard Motors: 120 volt, 60 cycle. Special Motors: 24 or 240 volt, add **$1.10**; 25 or 50 cycles, add **$1.10**.

†120 volt, 60 cycle motor. 25 or 60 cycle, add **$1.10**.

SANGAMO TIME SWITCHES

TYPE L—SYNCHRONOUS



Type L
(Supersedes KA)

Sangamo Hysteresis, high-torque self-starting motor, slow speed 450 r.p.m. unaffected by extreme temperatures.

Pure silver contacts, conservatively rated 35 amperes on Types 11, 12, 21. Two pairs of setting levers, 90 minutes between "off" and "on," 30 minutes between "on" and "off." Reversible time limits if ordered. Gasket sealed, rain proof case.

Dimensions: 10¼ inches high, 5¼ inches wide, 4 inches deep overall. Shipping weight, approximately 7 lbs.

Type	Poles	Throw	AC Amperes Circuit	List Price
L-11	Single	Single	35	$26.95
L-21	Double	Single	35	29.70
L-31	Triple	Single	6	33.55
L-12	Single	Double	35	29.70
L-22	Double	Double	6	32.45
L-32	Triple	Double	6	35.75
LZ,	Standard Astronomic Dial, add			$12.10
LH,	"On" Omitting Device, add			2.20
LF,	"Off" Omitting Device, add			2.20
LHE,	Advance Time Cutoff, add			7.70
LO,	Weatherproof-windowless Case, add			22.00
LR,	Extra Setting Levers, per pair			.55
LG,	Reverse Time Limits, no extra charge.			

TYPE W—SYNCHRONOUS CARRYOVER



Type W
(Supersedes VSW)

Type W, by combining synchronous timing with reserve spring clock operation, provides accurate timing during power shortages up to 10 hours and eliminates necessity of resetting of dial.

A new positive action thermal-blocking device releases the reserve timing movement during service interruptions. When power is restored, the synchronous motor resumes the timing operation and re-winds the spring of the clock movement. In all other respects, the specifications of Type L apply.

Type	Poles	Throw	AC Amperes Circuit	List Price
W-11	Single	Single	35	$47.85
W-21	Double	Single	35	50.60
W-31	Triple	Single	6	54.45
W-12	Single	Double	35	50.60
W-22	Double	Double	6	53.35
W-32	Triple	Double	6	56.65
WZ,	Standard Astronomic Dial, add			$12.10
WH,	"On" Omitting Device, add			2.20
WF,	"Off" Omitting Device, add			2.20
WHE,	Advance Time Cutoff, add			7.70
WO,	Weatherproof-windowless Case, add			22.00
WR,	Extra Setting Levers, per pair			.55
WG,	Reverse Time Limits, no extra charge.			

Standard Motors: Specify 120 or 240 volts, 60 cycle. Special motors: 25 or 50 cycle, add **$1.10**; 24 volt, add **$1.10**; 480 volt (60 cycle) add **$6.60**.



ASTRONOMIC DIAL

When a Sangamo Time Switch is fitted with an Astronomic Dial it will automatically turn lights "on" at sunset and "off" at sunrise, compensating progressively day by day for the change in seasons. Or, this dial permits the "off" operation at any time between 9:30 p.m. and 2:15 a.m.

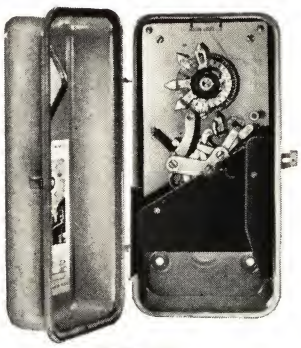
Ideal control for: outdoor advertising, street-, flood-, air beacon-, light house-, and yard-lighting.

Standard latitudes 30°, 35°, 40°, 42½° and 45° add **$12.10**.

Special latitudes 20°, 27½°, 32½°, 37½°, 50° and 52° add **$16.50**.

SANGAMO TIME SWITCHES

2-CIRCUIT TYPES LY AND WY
(Supersedes KAY and VSWY)



Type LY

The synchronous Type L and carry-over Type W in two circuit construction. The "on" and "off" operations of each circuit are independent, (except when Omitting Device or Astronomic Dial is required). Equipped with 2 pairs of tripping levers.

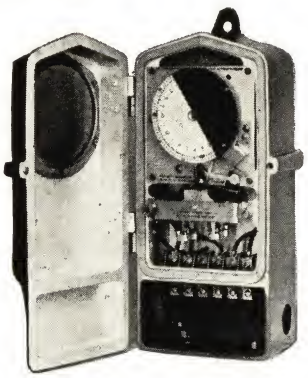
Type	Description	A.C. Amp. Per Circuit	List Price*
LY-11	Two Circuit	35	**$35.75**
WY-11	Two Circuit	35	**57.75**

LYZ or WYZ, Standard Astronomic Dial, add **$12.10**
LYH or WLH, "On" Omitting Device, add..... **2.20**
LYF or WYF, "Off" Omitting Device, add..... **2.20**
LYO or WYO, Weatherproof-Windowless Case, add **22.00**
LYR or WYR, Extra Setting Levers, per pair..... **.55**
LYG or WYG, Reverse Time Limits, No extra charge.

*Standard Motors: Specify 120 or 240 volt, 60 cycle.

TYPE TC ELECTRICALLY-WOUND
A.C. or D.C.

Built for extreme precision. Electrically-wound movement with full eleven-jeweled escapement. Mainspring reserve operates switch during current interruptions up to twenty hours. Particularly advantageous when controlled frequency is not available. ON and OFF operations can be set as close together as 15 minutes.



Type TC

Alternating Current

Type	Poles	Throw	A.C.—120 V. Amp.	List	A.C.—240 V. Amp.	List
TC-11	Single	Single	30	**$101.20**	30	**$101.20**
TC-12	Single	Double	30	**103.40**	30	**103.40**
TC-21	Double	Single	30	**105.60**	30	**105.60**
TC-22	Double	Double	30	**110.00**	30	**110.00**
TC-31	Triple	Single	10	**107.80**	10	**107.80**
TC-32	Triple	Double	10	**127.60**	10	**127.60**

Direct Current

Type	Poles	Throw	D.C.—120 V. Amp.	List	D.C.—240 V. Amp.	List
TC-11	Single	Single	30	**$110.00**	15	**$110.00**
TC-12	Single	Double	30	**112.20**	15	**112.20**
TC-21	Double	Single	30	**114.40**	15	**114.40**
TC-22	Double	Double	30	**118.80**	15	**118.80**
TC-31	Triple	Single	10	**116.60**	5	**116.60**
TC-32	Triple	Double	10	**136.40**	5	**136.40**

Specify voltage and frequency. 6⅛" wide, 13 $\frac{5}{32}$" high, 4 $\frac{11}{32}$" deep. Shipping weight, 20 pounds.

Type TCZ, Standard Astronomic Dial, add **$12.10**. Type TCH, "ON" Omitting Device, add **$6.60**. Type TCHE, Advance Time Device, add **$13.20**. Special Motor Voltages, other than listed, add **$5.50**. Momentary Contacts (TC-12 only) ½ to 2 Seconds, add **$8.80**. Momentary Contacts (TC-12 only) 4 to 5 or 8 to 10 Seconds, add **$15.40**.

INTER-MATIC TIME SWITCHES

For Ordinary Automatic Control Requirements



These INTER-MATIC Time Switches are sturdy, accurate, and dependable. In spite of their low cost, they represent the very finest in design, material and workmanship.

Recommended for controling store lighting, neon signs, apartment hall and stairway lights, outdoor poster lighting, refrigerator defrosting, pumps, blowers, attic fans, etc. Rated 35 amps. at 125 volts.

Particular buyers will like the many outstanding features which make INTER-MATIC the easiest time switch to install, set and operate.

Model No.	Description	Shpg. Wt. Lbs.	Price Each
TS50SP	Single Pole, Single Throw....	4	**$10.95**
TS50DP	Double Pole, Single Throw....	4	**12.95**

Above prices are for 125V. 60 cycle models, for other voltages and cycles, add **$1.00.**

Specifications

Timing Motor: Reliable, self-starting, slow speed, high torque, synchronous, quiet, fully enclosed, permanently lubricated. Easy to check operation thru window in motor cover.

Time Dial: Large numbers, clearly defined time divisions, easily set.

Timing Range: Minimum—1 hour. Maximum—23 hours. Up to 12 "on" and "off" operations every 24 hours.

Manual Control: The switch may be turned "on" or "off" manually whenever desired, irrespective of the time settings.

Automatic Reset: Regardless of whether the switch has been turned "on" or "off" manually, the time cycle is always resumed automatically.

Terminals: Large terminal screws. Terminals are covered. Large bus bars carry the current.

Knockouts: Combination ½-inch and ¾-inch, one in the back, one in each side of the case, and two in the bottom.

Case: Drawn steel, round corners, 7¾ inches high, 5 inches wide, 3 inches deep, in light hammered finish. Hole provided in hasp for seal or lock.

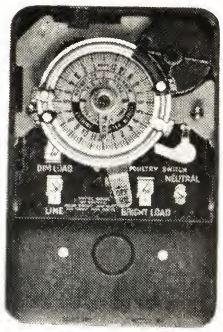
Accessibility: Entire mechanism removed by pressing a single metal clasp. All parts easily replaced.

Installation: May be installed either outdoors or indoors. Not waterproof.

Trippers: No special dial required for adding trippers. Trippers attached without removing the dial.

Switch Contacts: Large silver, snap-action contacts. Up to 35 amperes at 125 volts.

INTER-MATIC POULTRY HOUSE TIME SWITCHES



Using lights in the poultry house during the fall and winter months results in 20 to 30 per cent greater egg production — at a time when egg prices are highest. Artificial lighting is most effective when it is regular in occurrence. For accurate, dependable automatic control, use Inter-matic Time Switches.

MODEL TS50PS

For Morning and Evening Lighting

Model TS50PS controls both morning and evening lighting. Equipped with a dimmer switch which provides for a 20-minute "dimming" period after the bright lights go "off," enabling hens to reach the roost safely. Watt capacity: "bright"—300 watts (24 amperes at 125V): "dim"—1000 watts (8 amperes at 125V). Shipping weight, 4 lbs.

Price, Model **TS50PS** (125V. 60 cycle) .....each **$11.95**

For 125V, 60 cycle or 25 cycle, add **$1.00.**

Note: For morning lighting only, the standard single-pole, single-throw Inter-matic Model TS50SP is recommended. Capacity: 4000 watts.

MARK-TIME SWITCHES

3300 SERIES COIN METERS

Used by apartment houses for laundry equipment — washers and ironing machines. Also for sun lamps, "Gym" devices, night tennis courts, amusement park devices, for current in tourist camps. Takes dimes for 20 minutes and quarters for an hour. Other timings available.



No.	Style	Price
3301	AC only	**$20.45**
3202	AC-DC	**21.55**

5600 SERIES MARK-TIMERS



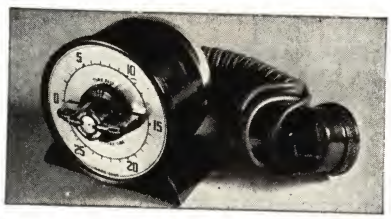
Bell gives one lively musical chime at any time selected. An ideal time reminder and memory jogger for kitchens and other household uses; business and professional offices; hospitals, schools, etc. Non-electric. Every place a clock is used, a Mark-Timer is needed to tell when "time's up."

No.	Description	Price
5601	1 hour	**$4.85**
5606	½ hour	**5.95**
5608	15 minutes	**5.95**
5612	5 minutes	**5.95**
5614	60 seconds	**5.95**

MARK-TIME SWITCHES

MARK-TIME PORTABLE SWITCHES

Controls the time operations of any electrical appliance, device or circuit. Black bakelite case. Brushed chromium dial. Equipped with 6 feet rubber extension cord and series tap plug. Single-pole, single-throw. Current rating—15 amp., 125 volts; 5 amp., 250 volts; A.C. or D.C., any cycle.



Turns current "off" at any time up to maximum time interval of switch. Used for heating pads, washing machines, electrical kitchen appliances, air conditioners, fans, room heaters, beauty shop machines, industrial machinery.

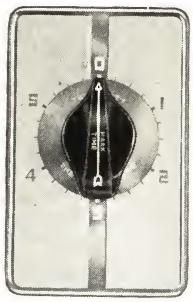
No.	Description	Price
5901	15 minute "off" switch	**$9.75**
5902	30 minute "off" switch	**9.75**
5903	60 minute "off" switch	**8.65**

No. 5905 5-HOUR "ON" OR "OFF" SWITCH

Turns current "on" or "off" at any time up to a maximum of five hours. 15 amperes. Used for radio sets, ventilating fans, neon signs, electric roasters, refrigerators, oil burners, battery chargers, garage heaters, poultry and dairy applications, and all uses listed under No. 5902.

Price, No. **5905** 5-hour "on" and "off" switch .....each **$10.70**

9000 SERIES WALL SWITCH



Wall type unit which may be used to provide delayed action for porch or garage lights where it is desired to provide illumination for any predetermined time interval. Mechanically operated, wound and set simultaneously for time by merely turning the knob clockwise. Rugged and durable, this switch has full 20 amp. capacity and is rated for continuous duty. Ivory finish. Plate sets flush with wall in outlet box 2½ inches or more deep.

No. **9000** Series Wall Switch in any timing up to 12 hours.....each **$8.75**

5700 PHOTOGRAPHIC TIMER

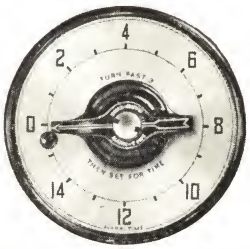
An attractive unit mounted in black bakelite case timed for 60 minutes, and easily portable for service anywhere in the home. Excellent for timing cooking operations, phone calls, sun lamp treatments, etc. Sounds lingering chime note at end of set time. Adjustable stop permits resetting by sense of touch.



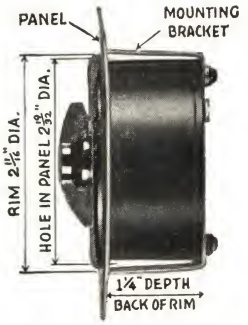
Price, No. **5705** (60 sec.).....each **$7.40**

MARK-TIME INDUSTRIAL SWITCHES

FOR BUILT-IN APPLICATIONS



Regular type dial illustrated. Other dials obtainable are Hold type, Stop type, or Toggle type — each for a definite type of application.



Note U-type bracket and mounting dimensions.

Series 4900 — 5000

Manufacturers of appliances, machines, and equipment operated by electricity, are making their products of more service to the user and more saleable, with these built-in timing switches. Any device operated by a motor or utilizing electrical current, needs Mark-Time.

Mark-Time switches are single-pole, single-throw; standard rating — 10 amps., 125 volts; 5 amps., 250 volts.

These units are also available in two circuits, four terminal type in the various time intervals of 60 seconds, 5 minutes, 15 minutes, 30 minutes, 60 minutes, and five hours.

Mark-Time switches are used as standard equipment by many of the world's largest manufacturers of electrical appliances. They give a product a new and interesting talking point for increased sales.

Typical Applications (Appliances)

Washing machines, cookers, air conditioners, beauty parlor machines, electric roasters, distilling equipment, radios, sun lamps, medical or laboratory apparatus, refrigerators, testing instruments, fans, ventilators, stoves, motor driven tools, restaurant equipment, electronic devices, electric furnaces, mixers.

Typical Applications (Factory Production)

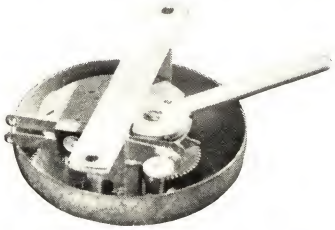
Practically every manufacturer needs Mark-Time to improve quality, cut down waste and spoilage, and lower manufacturing costs. For electrical and non-electrical production processes Mark-Time signal's "times's up" from raw material to finished product.

Vulcanizing, cleaning and dying, metal treating, textile processes, tanning, inspection or assembly, moulding.

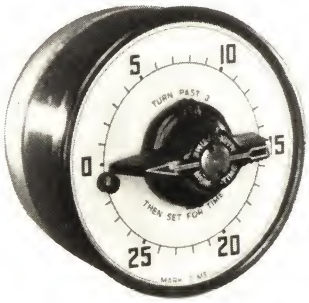
Complete details of regular models, special features for any application on request.

MARK-TIME SWITCHES

BUILT-IN BELL-TIMERS AND SWITCHES



Series 4400 — Furnished at contract prices to appliance manufacturers, with or without housing, in any timing between 2 minutes and 10 minutes.

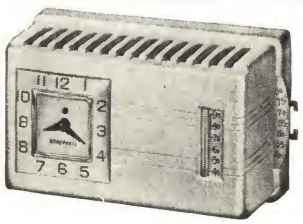


Series 5081 — Excellent for non-electrical test work, where operator is at hand. Rings one loud, clear chime at end of time set. No electrical connections. Standard timing, 15 minutes and 60 minutes. Special models with etched dials available for appliance application when merchandising style is desired.

Prices on request.

MINNEAPOLIS-HONEYWELL REGULATORS

CHRONOTHERM*—ROOM THERMOSTATS



These Chronotherms are the latest in automatic thermostats. Day and night control points and clock settings can be made externally with internal temperature-lock settings. "Setback" and "pickup" time settings are adjustable in any fractions of an hour, with a minimum of 6 hours setback. The slow rise cam allows a gradual increase in setting at morning pickup time which helps in reducing the "overshooting" tendency of some heating plants.

Available in Series 20 (TA247A), and Universal Series 10-80 (TM848A and TM850A). Range 50° to 80° F.

The TM848A Plug-in type is specifically designed for convenient replacement having a "plug-in" transformer, a universal heater element and snap-action three-wire switching contacts.

Silver bronze finish. Special finishes available at extra cost. Submit sample. Dimensions — Overall: height, 2⅞ inches; width, 5 inches; depth, 2½ inches.

Type	Series	Switch	Action on Temperature Fall	Price Each
TA247A	20	S.P.D.T.	Opens circuit	**$35.90**
TM848A	10–80	3W Snap	Closes circuit	**35.90**
TM850A	10–80	3W Snap	Closes circuit	**35.90**

MINNEAPOLIS-HONEYWELL REGULATORS

LIGHT DUTY LINE VOLTAGE THERMOSTAT



Magnetic snap-acting, bi-metal actuated room thermostats, suitable for either line or low voltage applications. Types available for either heating or cooling systems. May be used for direct control of small motors, unit heaters, coal blowers, etc. Temperature setting by external lever in bottom. Silver bronze finish. Height 5 inches; width 2 inches; depth 1⅞ inches. Range: T44A—44° to 76° F. or 54° to 86° F. Special range (T44A) 34° to 66° F. and 64° to 96° F. (or Centigrade equivalent) at **$5.30** list extra.

Special Features: (T44A only) Night shut-off at no extra cost. (T44A only) Centigrade scale equivalent to standard Fahrenheit range at no extra cost. Locking device (cover lock screw) at no extra cost. Blank Cover (less thermometer) at no extra cost.

Price, Type **T44A** Thermostat.....each **$12.20**

TYPE T491B AIRSWITCH

Mercury Switch Type



The Airswitch is a heavy duty room type thermostat for controlling either cooling or heating equipment, such as unit heaters, refrigeration compressors or solenoid valves. It is widely used in greenhouse, garages, warehouses, cooler rooms, florist cabinets and similar applications. The non-corrosive bi-metal actuating element and mercury switch contacts make the Airswitch suitable for use under extreme conditions of temperature and humidity. A locking screw beneath the cover is provided to prevent tampering with the setting indicator.

Type T491B Airswitch (for heating) makes contact on temperature fall (Series 40). Aluminum bronze finish. Special finish at extra cost. Supplied in ranges 15–95° F. standard.

Dimensions: Height 5¼ inches; width 4 inches; depth 3 inches.

Price, Type **T491B** Airswitch.....each **$14.00**

HEAVY DUTY LINE VOLTAGE THERMOSTAT

Mercury Switch Type



Heavy duty line or low voltage thermostats for control of heating or cooling systems. Capable of handling directly large motor driven unit heaters, coal blowers, cooling systems, etc. Provided with a bellows and a bellows actuated mercury switch. On large or polyphase motors, may be used in connection with magnetic starters.

Adjustment by external knob at side of case. Silver bronze finish. Height 5⅞ inches; width 3⅜ inches; depth 2¼ inches. Range: 40° to 80° F. or 60° to 100° F.

Price, Type **T42A** Thermostat.....each **$15.90**

MINNEAPOLIS-HONEYWELL REGULATORS

MANUAL THERMOSTATS



The new comfort ingredient—TM — Thermostat Magic — has been incorporated in all Honeywell domestic thermostats. Comfort Thermostats incorporating the new TM design automatically control the delivery of heat as it is needed. Heat is provided in smaller portions in mild weather, and in progressively larger portions as the weather gets colder.

The T21A Acratherm is a bi-metal actuated room temperature controller which should be used only in conjunction with other Series 20 devices such as Series 20 motors, gas valves, etc.

The T19A Twin Acratherm is used with the R154 Timerelay to furnish day-night control on domestic and industrial stokers at a minimum cost.

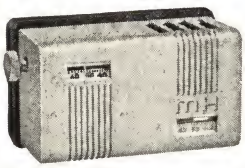
Silver bronze finish. Dimensions: Height 4⅜ inches, width 1¾ inches, depth 1⅞ inches. Adjustable differential. Factory set at minimum. Low voltage A.C. only. 25 units per carton.

Type	Series	Switch	Range	Weight Lbs.	Price Each
TM11A	10	S.P.S.T.	55 to 85F*	0.5	**$11.40A**
TM81C	80	S.P.S.T.	55 to 85F*	0.5	**11.40A**
T21A	20	S.P.D.T.	55 to 85F*	0.5	**11.40A**
			Day		
T19A	10	(2)S.P.S.T.	55 to 85F	0.75	**23.50A**
			Night		
			50 to 74F	0.75	**23.50A**

When ordering specify: (1) Type number. (2) Type number, voltage and frequency of device to be controlled. (3) Special features desired.

*Special ranges 45 to 75 F and 35 to 65 F or Centigrade equivalents at **$5.30** list extra.

TYPE TA42A THERMOSTAT



Type TA42A has been purposely designed for use where accurate and dependable control of line voltage, heavy duty devices are involved and is capable of handling directly large motor-driven units, industrial and commercial stoker fired heating plants, etc. On larger or polyphase motors it should be used in connection with magnetic starters. Where desired, it can be used in low-voltage circuits.

The horizontal design provides maximum air circulation and greatly reduces the effect of contact heat. The new M-H Con-Tac-Tor snap-switch provides the starting action. This is a non-magnetic switch, self-enclosed to protect it from dirt, dust, moisture and grime, and has been proved by exhaustive tests to be capable of years of dependable service. Another distinctive feature is the temperature setting knob which can be removed to lock the thermostat in order to prevent tampering. Models are also available with a "positive on" feature for cooling applications.

Type TA42A makes contact on temperature fall (Series 40). Range 42-75° F. and 56 to 84° F.

Finish: Silver bronze on grey sub-base. (Special finishes available at extra cost).

Dimensions: Height 2⅞ inches; depth 2⅜ inches; width 5 inches (including knob).

Price, Type **TA42A** Thermostat.....each **$15.90**

MINNEAPOLIS-HONEYWELL REGULATORS

LIMIT CONTROLS

AIRSTAT*



Designer for bonnet mounting, these devices furnish high limit protecion to warm air furnaces. Airstats are available with adjustable or fixed differentials as well as fixed or adjustable stops to limit the maximum temperature setting.

The La419D Fan Safety Cutoff, designed for duct mounting on air conditioning jobs, stops fan operation when the temperature rises to a dangerous point. Manual resetting is necessary in order to resume operation following a shutdown.

Black Kristo Krak finish. Case Dimensions: 4⅜x3x2⅛ inches deep.

Differential: LA119A, LA219A and LA419A — Non-adjustable, approximately 25F; LA119B and LA419B — adjustable approximately 18 to 100 F; LA419D — Manual reset.

Mercury Switch: LA119A—AS454A; LA119B—AS454A; LA219A—AS607C; LA419A, LA419B, LA419D—AS454A. Element length: 10¼ inch maximum standard for swivel mounting bracket.

Special Features Available: Fixed or adjustable "stops" to limit maximum setting at no extra cost. Special insertion lengths to 18 inches maximum at **$6.60** list extra. Centigrade markings equivalent to standard Fahrenheit range at **$1.30** list extra.

When ordering specify (1) type number, (2) element length, (3) special features required.

Type	Series	Range F.	Rating in Amps. Running Current 115V. 230V.	Wt. Lbs.	Price Each
LA119A	10	50 to 350	Low Voltage	1.4	**$9.90**
LA119B	10	50 to 350	A.C.	1.4	**10.60**
LA219A	20	50 to 350	Only	1.25	**9.90**
LA419A	40	50 to 350	A.C. 7.4 5.1	2.25	**9.90**
LA419B	40	50 to 350	D.C. 2.4 1.2	2.25	**10.60**
LA419D	40	45 to 125	A.C. 7.4 5.1	2.25	**17.00**
		75 to 165	D.C. 2.4 1.2		

Switch: S.P.S.T. except LA219A which has S.P.D.T. Units per carton: 20.

TYPE L147A SUMMER-WINTER CONTROLLER



The L147A Summer-Winter combines the functions of an R132A relay and L170A Aquastat into one unit. This combination operates the burner and circulator in response to the thermostat and maintains minimum boiler temperature for domestic hot water. Seasonal resetting of the control point is unnecessary.

Black Kristo Krak finish. Voltage and frequency: 115 or 230 volts, 50 or 60 cycle.

Case Dimensions: 5¼x5⅝x3¾ inches deep.

Adjustable differential, approximately 10 to 20 F. Protecting well: 2½ inch insertion length including ¾ inch pipe threads.

Special voltages and frequencies at **$5.30** list extra. When ordering specify (1) type number (2) voltage and frequency. Units per carton: 8.

Type	Series	Range F.	Rating in Amps. Running Current 115V. 230V.	Wt. Lbs.	Price Each
L147A	10	60 to 200	A.C. 10.2 5.1	4	**$21.80**

MINNEAPOLIS-HONEYWELL REGULATORS

LIMIT CONTROLS—WARM AIR

COMBINATION FURNACE CONTROL



LA Model

These devices combine the functions of a furnace fan controller and a high limit control. Settings are interlocked to prevent limit cutout below the fan "on" point. A manual fan switch on all models provides for continuous fan operation in the summer.

Black Kristo Krak finish.

Case Dimensions: Height 6⅛ inches, width 4⅜ inches, depth 2⅝ inches.

LA Models

Snapswitches (AS611A and AS211A) are used in the "LA" models. Independent settings of fan "on" and "off" and limit cutout point are featured in these models. The "B" models include an "overrun" switch to start the fan if excessive temperature occurs interlocked so it cannot be set less than 35 F. above the high limit setting. Element insertion length: 10¼ inches for swivel mounting standard.

Differential—Fan: 15 to 150 F. adjustable. Limit Control: Approximately 25 F. non-adjustable. Overrun switch on "B" models: Approximately 25 F. non-adjustable.

Special Features Available: Locking cover at no extra. LA101A, LA201A and LA401A available with 100 to 200° limit control scale plate at no extra cost. Where Underwriters requirement applies 200° scale plate or fixed stop is required.

Rigid mounting flange at no extra cost. Centigrade markings equivalent to standard Farhenheit ranges at **$1.30** list extra.

Special element lengths: 4 inch for swivel mounting and 11½ inch or 5 inch for surface mounting at no extra cost (where available). LA401A—Internal barrier to separate fan and limit switch terminals at no extra cost.

L Models

Mercury switches are used in the "L" models: L101A—AS454A and AS431C; L401A—(2) AS-454A. Element insertion length: 10 to 15 inch standard.

Differential: Adjustable 20 to 40 F.

Special Features Available: Rigid mounting flange at no extra cost. Special element insertion lengths: 6¾ inch to 9¾ inch, or 5½ to 6½ inches at no extra cost.

When ordering specify (1) type number (2) element length (3) special features required.

"LA" Models Without Overrun Switch

Types	Series	Rating in Amps. Fan & Overrun* 115V.	230V.	Limit Control* 115V.	230V.	Price Each
LA101A	10	7.4	6.5	Low Voltage		**$19.30**
LA201A	20	7.4	6.5	AC Only		**19.30**
LA401A	40	7.4	6.5	7.4	6.5	**19.30**

Switch: LA101A—2 S.P.S.T.; LA201A—1 S.P.D.T., 1 S.P.S.T.; LA401A—2 S.P.S.T. Range: On: 60 to 200°. Off: 50 to 190°. Limit Control—100-250°. Weight: 4.75 lbs. Standard Carton: 10. *Running Current. Also available with overrun switch.

"L" Models

Type	Series	Rating in Amps. Fan & Overrun* 115V.	230V.	Limit Control* 115V.	230V.	Price Each
L101A	10	AC 7.4	5.1	Low Voltage		**$19.30**
		DC 2.4	1.2	AC Only		
L401A	40	AC 7.4	5.1	7.4	5.1	
		DC 2.4	1.2	2.4	1.2	**19.30**

Switch: L101A—2 S.P.S.T.; L401A—2 S.P.S.T. Range F. Fan "On" 50 to 175°. Weight: L101A—3.5 lb. 4 per carton: L401A—5 lb. 10 per carton. *Running Current.

MINNEAPOLIS-HONEYWELL REGULATORS

FURNACESTAT*—Mercury Switch Type



This device is a furnace fan controller which prevents circulation of cold air by permitting fan operation only when the air temperature in the bonnet is within scale settings. A simple manual adjustment provides fan operation (for cooling) during summer.

Bi-metal actuated type with mercury switch for control of the fan circuit. Swivel bracket mounting. Scale setting visible, adjustable by external screw. Differential setting by internal lever. Internal wiring connections. Black Kristo Krak finish. Dimensions: (Case) Height 4⅜ inches; width 3 inches; depth 2⅛ inches. Special insertion lengths to 18 inches maximum at **$6.60** list extra.

Price, Type **LA412A** Furnacestat.....each **$11.20**

*Trade Mark.

PRESSURETROL—LIMIT CONTROLS—STEAM



Designed for application as a high limit control on steam heating systems. It is also available for use to control air, liquid or non-combustible gases, providing their chemical content is not injurious. The "P" models are available for low pressure ranges while the "L" models are high range types.

Action: "A" models "break" contact, "B" models "make" contact, on pressure rise. Black Kristo Krak finish. Case dimensions: Height 4½ inches, width 3½ inches, depth 2½ inches.

Type	Series	Rating in Amperes Running Current		Mercury Switch	Carton	Price Each
P104A	10	Low Voltage A.C. Only		**AS452A**	20	**$10.10A**
P104B	10			**AS452A**	20	**10.10A**
P204A	20			**AS607A**	20	**10.10A**
		115 V.	230 V.			
P404A	40	A.C. 7.4	5.1	**AS452A**	20	**10.10A**
P404B	40	D.C. 2.4	1.2	**AS452A**	20	**10.10T**
L104A	10	Low Volt. AC		**AS454A**	10	**16.70A**
L404A	40	A.C. 7.4	5.1	**AS452A**	10	**16.70A**
L404B	40	D.C. 2.4	1.2	**AS452A**	10	**16.70T**
L604A	60	A.C. 1.0 D.C. 1.0	0.5 0.5	**AS607A**	10	**17.60A**

Special features available: External hand adjusting knob at **$0.60** list extra (supplied as standard at no extra cost on 10 to 300 lb. range). Special range: L404A, L404B and L604A—10 to 300 lb. range at **$6.50** list extra.

Mounting lugs for P404A and P404B at **$1.30** list extra. Siphon 14026 furnished as standard on 10 to 300 lb. range. At **$1.10** list extra on lower ranges.

MINNEAPOLIS-HONEYWELL REGULATORS

SURFACE AQUASTAT*



Surface mounting limit controls with bi-metal sensing element and mercury switching means. No insertion element. Primary application is that of safety or high limit control (in conjunction with a room thermostat) on all types of hot water heating systems. The reverse acting LA409B is used as a low limit control on unit heater installations to prevent fan operation when heater coils are at low temperature.

Convenient mounting bracket and pipe straps for rigid installation; may be mounted on vertical, horizontal or angled pipes. Control point adjustment by screwdriver slot through cover. Black Kristo Krak finish. Range: 100° to 200° F. Height 4⅜ inches; width 3 inches; depth 2⅛ inches. Centigrade scale markings equivalent to standard Fahrenheit range at **$1.30** list extra.

Type	Series	Range	Shpg. Wt. Lbs.	Price Each
LA109A	10	100-200F	1	**$9.90**
LA209A	20	100-200F	1	**9.90**
LA409A	40	100-200F	1	**9.90**
LA409B	40–10	100-200F	1	**9.90**

*Trade Mark.

IMMERSION AQUASTAT*



These devices are used as high limit controls on hot water systems, and also as low limit controls with summer-winter hot water installations. The L144, L244 and L444 models are designed for horizontal mounting only, while the L454 models are for vertical mounting. A visible scale and external means of adjustment permit easy adjustment of all models.

Action: "A" models break contact, "B" models make contact, on temperature rise. Black Krak finish. Case dimensions: Height 4⅜ inches, width 3 inches, depth 2⅛ inches.

Differential: L144A, L144B—non-adjustable approximately 5 F. L244A, L444A, L444B—non-adjustable, approximately 10 F. L454A, L454B — adjustable, approximately 12 to 40 F.

Protecting Well: L144, L244, L444—2½ inches including thread. L454—3¾ inches including thread.

Mercury Switches: L144A, L144B—AS415A, L244A—AS605A. L444A, L444B, L454B, L454B—AS454A.

Type	Series	Range	Rating in Amps. Running Current	Carton	Wt. Lb.	Price Each
L144A	10	80-240F	Low	20	1¾	**$11.20A**
L144B	10	80-240F	Voltage	20	1¾	**11.20A**
L244A	20	80-240F	A.C. Only	20	1¾	**11.20A**
L444A	40	80-240F	115 V	20	1¾	**11.20A**
L444B	40	80-240F	230 V	20	1¾	**11.20A**
L454A	40	80-220F	AC 7.4 5.1	10	2	**17.00A**
L454B	40	80-220F	DC 2.4 1.2	10	2	**17.00A**

Special features available: Centigrade markings equivalent to standard Fahrenheit range at **$1.30** list extra. Special ranges at **$7.90** list extra. Insertion lengths: L144, L244, L444—4½ inches and 6-inch well at **$2.60** list extra. Other lengths up to and including 12-inch at **$7.90** list extra (where available). Other special lengths subject to quotation.

*Trade Mark.

MINNEAPOLIS-HONEYWELL REGULATORS

PROTECTORELAYS*—OIL BURNER CONTROLS



These stack-mounted Portectorelays, RA116A for constant ignition burners and RA117A for intermittent ignition burners, operate quickly and reliably in low stack temperatures. Ignition failure causes the safety switch to "lock out" and the burner will not restart until manually reset. If the flame goes out, the Protectorelay will make one attempt to restart (recycle) after a scavenger period, and will "lock out" if the flame is not established. Both models recycle after power failure.

The R416A and R417A Lockswitches are D.C. relays designed for stack mounting and recycle on flame failure. A safety switch shuts down the burner if ignition fails, and the burner will not operate again until manually reset. The R417A is arranged to permit the use of a separate or a common ignition system.

RA116A and RA117A—115 volts, 50 or 60 cycles standard; case dimensions: Height 5⅜ inches, width 6⅛ inches, depth 3¼ inches, safety switch timing: Approximately 90 seconds; element insertion length 2½ to 6½ inches or 2½ to 9 inches.

R416A and R417A—32, 115 or 230 volts D.C.; case dimensions: Height 5½ inches, width 6⅛ inches, depth 3⅞ inches; safety switch timing: Approximately 120 seconds; element insertion length: Adjustable 5⅞ to 7¼ inches.

Type	Series	Ignition	Rating in Amperes Running Current 115V.	230V.	Wt. Lbs. Each	Price Each
RA116A	10	Constant	A.C. 7.4	3.7	5	**$33.40B**
RA117A	10	Inter.	A.C. 7.4	3.7	6	**37.00B**
R416A	40	Constant	D.C. 4.6	2.3	5¾	**42.50B**
R417A	40	Inter.	D.C. 4.6	2.3	6	**45.10B**

Packed 10 in a carton.

Special features available: Special voltages and frequencies on the **RA116A** and **RA117A** at **$5.30** list extra. Alarm circuit in safety switch at **$2.60** list extra.

STOKERELAY*



The Stokerelay combines the functions of a relay and a synchronous timing mechanism. The R183B maintains fire in a stoker fired furnace or boiler when the thermostat does not ordinarily call for enough heat to keep the fire alive.

Timing is adjustable from ½ to 7½ minutes every half hour or hour as desired. Standard voltage and frequency is 115 volts, 60 cycle. Case dimensions: Height 6⅜ inches, width 7¾ inches; depth 3½ inches.

Type	Series	Rating in Amperes Running Current 115V. A.C.	230V. A.C.	Carton	Wt. Lbs. Each	Price Each
R183B	10	10.2	5.1	10	5	**$28.00D**

Special features available: 115 volts, 50 cycle or 230 volts, 50 or 60 cycle at **$2.60** list extra. 115 or 230 volts, 25 cycles at **$7.90** list extra. Special timing for operation each ¼ or ½ hour at **$2.60** list extra.

*Trade Mark.

MINNEAPOLIS-HONEYWELL REGULATORS

OIL BURNER CONTROLS

INDUSTRIAL PROTECTORELAYS*



These Protectorelays provide adjustable timed ignition and delayed oil valve opening to control industrial oil burners with two-wire combustion controls. The burner will recycle after a power interruption.

The R161A, for intermittent ignition burners recycles on flame failure but cannot restart until the scavenger timing period has elapsed.

The R161B, for intermittent ignition burners, and the R161C, for constant ignition burners, are designed to provide prompt restart following normal burner shutdown. If flame failure occurs the relay will lock out with no attempt to restart.

Voltage and frequency: 115 volts, 50 or 60 cycles standard. For AC application only.

Black Kristo Krak finish. Case dimensions: Height 8½ inches, width 9⅜ inches, depth 4⅜ inches. Safety switch timing: approximately 90 seconds. Delayed oil valve timing: fixed approximately 30 seconds. Ignition switch timing: adjustable 15 to 120 seconds after oil.

Special features available: Special voltages and frequencies at **$5.30** list extra. Alarm contacts on the safety switch at **$2.60** list extra. When ordering specify (1) type number, (2) special features required.

Type	Series	Rating in Amps. Running Current 115V.	230V.	Wt. Lbs.	Std. Cart.	Price Each
R161A	10	A.C. 10.2	5.1	9.5	6	**$79.40**
R161B	10	A.C. 10.2	5.1	9.5	6	**79.40**
R161C	10	A.C. 10.2	5.1	9.5	6	**79.40**

COMBUSTION SAFETY

PROTECTOSTAT*



The C57A Protectostat is used as a safety control with a Protectorelay to prevent the continued operation of an oil burner under unsafe conditions. It is adaptable for fire door, brick work or blast tube mounting. Actuated by a diaphragm exposed to the radiant heat of the flame, the C57A is not affected by drafts, and is fast acting on flame failure. The C57A is designed for 2-wire low voltage or low ampere line voltage control. A mounting collar (20° adapter) is furnished with holes for ¼ inch bolts for fire door mounting.

Black Kristo Krak finish. Dimensions: Diameter 4½ inches, depth 9¼ inches. Insertion Tube Size: Outside diameter 2½ inches, length 5 inches. Maximum Diaphragm Temperature: 600 F.

When ordering specify (1) type number, (2) mounting means.

Type	Rating in Amps. 20V.	115V.	230V.	Wt. Lbs.	Std. Cart.	Price Each
C57A	½	¼	⅛	4.75	6	**$24.40**

*Trade Mark.

MINNEAPOLIS-HONEYWELL REGULATORS

OIL BURNER CONTROLS

V4001A DELAYED-OPENING OIL VALVE



The V4001A is a solenoid valve with a built-in delayed-opening feature for controlling the flow of oil in an oil line. The oil valve opens approximately 4 seconds after the burner motor is energized; this allows the fan to come up to speed before oil is discharged through the nozzle. Thus a normal operating fuel-air ratio is provided at the time combustion occurs. The valve closes instantly when the burner motor is de-energized.

Provides smooth, clean starts and instant, clean stops, reducing the possibility of start-stop oil odors. It also minimizes carbon coating on the burner nozzle and electrodes and reduces soot accumulation in the heat exchanger.

Valve seating is maintained in the de-energized position by spring loading the valve plunger. Therefore the valve can be mounted in any position.

Valve Pattern: ⅛-inch size, straight through or angle with plug in one inlet.

Voltage and Frequency: 115 volts, 60 cycles standard; 115 volts, 50 cycles at no extra cost. Other frequencies of 115 volts, 25 cycles, 208 volts, 60 cycles, or 230 volts, 50 or 60 cycles are available at **$2.60** list extra.

Maximum Ambient Temperature: 120 F. on 115 volt, 60 cycle models.

Type	Pressure Rating	Capacity	Power Consumption	Wt. Lbs.	Price Each
V4001A	150 Psi	See Pressure Drop Table	10 w.	1	**$9.70**

Valve Pressure Drop Ratings (Psi)

GPH	No. 1 Oil	No. 2 Oil	No. 3 Oil	GPH	No. 1 Oil	No. 2 Oil	No. 3 Oil
5	0.2	0.22	0.4	25*	5.0	5.4	5.9
10	0.8	0.9	1.24	30	7.4	7.9	8.4
15	1.8	2.0	2.4	35†	10.0	10.7	11.3
20	3.2	3.5	3.95	----	----	----	----

*Maximum nozzle rate at 150 Psi inlet.
†Maximum nozzle rate at 125 Psi inlet.

TYPE V5000A DRIBBLE-PROOF VALVE



The V5000A is a snap-acting pressure limiting valve for use in the supply line of high pressure burners. It prevents oil from reaching the nozzle until sufficient pressure is built up to properly atomize the oil. It also shuts off the oil supply as soon as pressure drops to a point where oil no longer would be atomized. There is no dribble of oil to foul up the nozzle and ignition electrodes.

This inexpensive Dribble-Proof Valve is easily installed and compact, having a $1\frac{1}{16}$-inch diameter, and the overall length is $1\frac{3}{8}$ inches, the same as the nozzle adapter which it replaces.

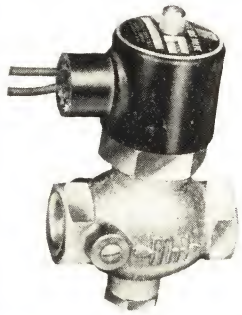
Maximum Operating Pressure: 150 lb. **Pipe Size:** ⅛ and ¼-inch. When ordering specify (1) Type number, (2) Pipe size.

Type	Weight Lbs.	Units Per Carton	Price Each
V5000A	0.25	25	**$4.20**

MINNEAPOLIS-HONEYWELL REGULATORS

GAS CONTROLS

GAS VALVES



These Solenoid valves are designed for use on gas fired furnaces, boilers, floor furnaces, space heaters, central heating units and conversion burners where two-wire control is used. All models are equipped with a positive action type plunger insuring positive opening and closing of the valve on the rated pressures. Series 40 valves operate on line voltage while series 80 valves operate on low voltage and are furnished with a power type, plate mounted transformer. The pressure rating on all valves is ¼ lb. except ½ lb. for Propane or Butane.

Voltage and Frequency: 115 volts, 50 or 60 cycles standard.

Special Features Available: V44B, V84C, V435B and V835D with manual opening feature at **$0.80** list extra. V435C and V835H for high sulphur content gas at **$2.60** list extra. V435D and V835J sulphur bearing gas models with manual opening feature at **$3.40** list extra. All types for Propane or Butane at no extra cost. V84 and B835: Other AC voltage and frequency at **$2.60** list extra. V44 and V435: Other voltage and frequency, and for DC at **$2.60** list extra.

When ordering specify (1) type number of valve, (2) size and (3) special features required.

Type	Size In.	Series	Dimensions A	B	C	D	Wt. Lbs.	Std. Cart-	Price Each
V435A	⅜	40	2¾	3⅝	$2\frac{3}{16}$	2	1.25	20	**$11.70**
V435A	½	40	2¾	3⅝	$2\frac{3}{16}$	2	1.25	20	**11.70**
V435A	¾	40	3½	3⅝	$2\frac{3}{16}$	2¼	1.5	20	**12.80**
V835A	⅜	80	2¾	3⅝	$2\frac{3}{16}$	2	4	20	**14.80**
V835A	½	80	2¾	3⅝	$2\frac{3}{16}$	2	4	20	**14.80**
V835A	¾	80	3½	3⅝	$2\frac{3}{16}$	2¼	4	20	**16.00**
V44A	1	40	4	$4\frac{29}{32}$	2⅜	3	4.75	10	**17.70**
V44A	1¼	40	4⅝	$4\frac{29}{32}$	2⅜	4	5	10	**21.50**
V84A	1	80	4	$4\frac{29}{32}$	2⅜	3	7	10	**21.10**
V84A	1¼	80	4⅝	$4\frac{29}{32}$	2⅜	4	7.5	10	**24.90**

Overall Dimensions: A—Face to face length. B—Center line of pipe to top. C—Center line of pipe to bottom (including manual reset). D—Overall width.

Y77 GAS PACKAGE

The Y77D and Y77E Package Sets contain the TM81C Comfort Thermostat, a two-wire low voltage V835 or V84 solenoid gas valve, transformer, cable and staples. The Y77E includes the manual opening feature on the valve. Valves for sulphur-bearing gas are available at extra cost.

Voltage and Frequency: 115 volts, 60 cycles A.C. standard. Other A.C. voltages and frequencies at **$2.60** list extra. Transformer: Plate mounted power type transformer standard.

Type	Thermostat	Valve	Valve Size In.	Capacity*	Weight Lbs.	Price Each
Y77D	TM81C	V835A	½	165	5.25	**$26.90C**
Y77D	TM81C	V835A	¾	295	5.25	**28.10C**
Y77D	TM81C	V84A	1	550	7.8	**33.20C**
Y77D	TM81C	V84A	1¼	750	8.3	**37.00C**
Y77E	TM81C	V835D	½	165	5.25	**27.70C**
Y77E	TM81C	V835D	¾	295	7.8	**28.90C**
Y77E	TM81C	V84C	1	550	7.8	**34.00C**
Y77E	TM81C	V84C	1¼	750	8.3	**37.80C**

10 sets per carton.

*In CFH, 0.6 specific gravity @ 0.5 inch W.C. pressure drop.

MINNEAPOLIS-HONEYWELL REGULATORS

GAS CONTROLS

C418A PILOTSTAT*



The C418A is a switch-type Pilotstat providing a constant pilot for igniting the main burner. It breaks the electrical circuit to the valve if the pilot flame is extinguished, and thus prevents the main gas valve from opening. After a flame failure the C418A must be manually reset. The manual reset button is designed so that the switch contacts cannot close until the pilot burner is ignited.

Dimensions: Height 4⅜ inches, width 2½ inches, depth 1⅜ inches.

Thermocouples: Q235A with Series 102600 burners. Standard lengths—18, 24, 30, 36, 40, 48, 60 and 72 inches.

When ordering specify (1) type number, (2) Thermocouple length, (3) type of gas, (4) pilot burner assembly (part number).

Type	Elect. Rating 230V. AC	Elect. Rating 250V. DC	Wt. Lbs.	Std. Cart-	List Price
C418A	3 Amps.	0.06 Amps.	0.75	1	**$10.40**

C409A PILOTSTAT

The Pilotstat together with the pilot burner forms an automatic pilot having two functions — to provide a constantly burning pilot for igniting the main burner, and to prevent the main gas valve from opening in case the pilot flame is extinguished.

The Pilotstat incorporates the thermo-electric principle, utilizing a thermocouple and electromagnet. The difference in temperature between two thermocouple junctions, one of which is located in the pilot flame, generates a current of sufficient magnitude to energize the electro-magnet which in turn will hold the contact of an electric switch closed. In case of pilot failure, the thermocouple cools, current is no longer generated, and the switch contacts are opened, breaking the circuit to the main gas valve.

A distinctive feature of these Pilotstats is the flexible separate thermocouple which assures easy installation. Available in four standard lengths, the thermocouple can be conveniently adapted to varying applications.

Maximum Temperature: Pilotstat mechanism, 225°, couple lead, 600°; thermocouple tip, 1400°.

Mounting: Type C409A—Provided with holes in back for wall mounting.

Thermocouple: Type No. Q500S. Four standard lengths available: 18, 24, 30 and 40 inch. Special lengths, 12 to 72 inch available at extra cost.

Dimensions: Height 6 inches, width 4⅜ inches, depth, 2⅝ inches.

Special Features Available (at extra cost) — 20402 Pilot Burner Assembly (for natural gas) .028 inch orifice, No. 16 tip; 20403 Pilot Burner Assembly (for manufactured gas) .030 inch orifice, No. 16 tip; 20416 Pilot Burner Assembly (for natural gas) 0.25 inch orifice, No. 15 tip; 20417 Pilot Burner Assembly (for manufactured gas) 0.30 inch orifice, No. 15 tip.

When ordering specify (1) type number, (2) type of gas, (3) Thermocouple length, (4) Pilot Burner Assembly.

Type	Series	Rating in Amps. 115V.	Rating in Amps. 230V.	Price Each
C409A	40	7.4 AC	5.1	.....
		2.5 DC	1.3	.....

MINNEAPOLIS-HONEYWELL REGULATORS

M-H RELAYS



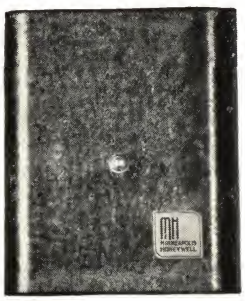
R132A

A complete line of simple and compactly designed relays is available for the requirements of various applications involving the control of line voltage loads from sensitive low voltage thermostats or controllers, or from line voltage controllers of limited capacity. Each is a complete self-contained unit. Relays equipped with Series 10 or Series 30 control circuits include a built-in transformer and are furnished for standard 115 or 230 volts, 50 or 60 cycle current. Relays for other commercial voltages or frequencies can be furnished at extra charge.

Type No.	Control Circuit Series	No. of Poles	Rating in Amperes 115V. A.C. Running Current	Rating in Amperes 115V. A.C. Locked Rotor	Rating in Amperes 230V. A.C. Running Current	Rating in Amperes 230V. A.C. Locked Rotor	Price Each
R15A*	40	1	4.5	45	2.3	23.0	**$17.00**
R19A	10	1	10.2	61.2	5.1	30.6	**11.00**
R132A	10	2	7.4	44.4	3.7	22.2	**14.10**

*D.C. only.

UNIVERSAL RELAYS

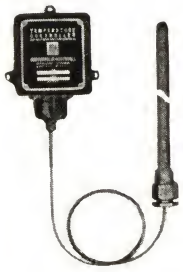


Furnished in 230 volts, 50 or 60 cycle rating at no extra cost (R182 only). For other A.C. voltages and frequencies add **$5.30** list extra.

Type No.	Switch Action	Control Circuit Series	Rating in Amperes* 115V. 50-60 Cy. Running Current	Rating in Amperes* 115V. 50-60 Cy. Locked Rotor	Rating in Amperes* 230V. 50-60 Cy. Running Current	Rating in Amperes* 230V. 50-60 Cy. Locked Rotor	Price Each
R182A	SPST	10, 20 or 80	10.2	61.2	5.1	30.6	**$13.90**
R182B	SPDT	10, 20 or 80	7.4	44.4	3.7	22.2	**16.50**
R182C	DPDT	10, 20 or 80	7.4	44.4	3.7	22.2	**18.00**
R482A	SPST	40	13.0	78.0	6.5	39.0	**11.70**
R482B	SPDT	40	13.0	78.0	6.5	39.0	**12.90**
R482C	DPDT	40	13.0	78.0	6.5	39.0	**13.50**
R882A	SPST	80†	13.0	78.0	6.5	39.0	**11.70**
R882B	SPDT	80†	13.0	78.0	6.5	39.0	**12.90**
R882C	DPDT	80†	13.0	78.0	6.5	39.0	**13.50**

†Low Voltage; transformer not included.

TYPE T415 TEMPERATURE CONTROLLER



Temperature controllers are commonly used to control temperatures in ducts, tanks, boilers, etc. Pressure changes in the vapor filled capsule are transmitted through a flexible element to a bellows in the instrument, which in turn operates a mercury switch.

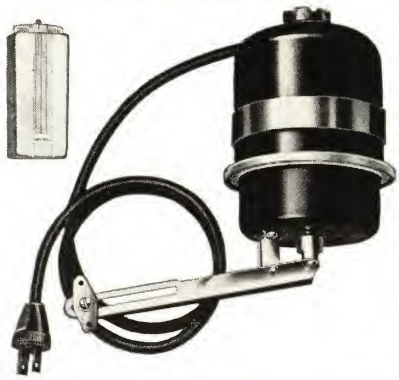
Capsule Fill: "Cross ambient" for ranges up to and including 65-140° F. "High temperature" fill for higher ranges.

Element: 5-ft. tubing standard, including capsule; 10-ft. at extra cost. Element Material: Copper capsule and tubing standard for all ranges.

Ranges: 0-70° F., 15-90° F., 60-100°F., 65-140° F., 75-200° F., 80-210° F., 105-220° F. Other ranges available, prices on request.

Price, Type **T415A** Temperature Controller in above ranges, with 5-ft. element .....each **$26.00**

MINNEAPOLIS-HONEYWELL REGULATORS



Y219A Damper Regulator—M828A Damper Motor

TYPE M828A DAMPER MOTOR

The M828A damper motor offers quiet, "fail safe," and economical operation of hand-fired heating plants. A small, powerful electric pump develops hydraulic pressure in a diaphragm to open the draft damper. A built-in return spring compresses the diaphragm and closes the draft damper when power is interrupted by the thermostat or otherwise. Low voltage power for the pump is furnished by a built-in transformer. The "plug in" connection and standard fittings (furnished when the order includes a thermostatic control) make installation simple and easy.

Power consumption: 2 watts standby; 13 watts lifting and holding. Voltage and frequency: 115 volts, 60 cycle. Maximum load at extreme radius: 5 lb. 230 volts, 60 cycles available at **$2.60** list extra.

Type	Series	Wt. Lbs. Each	Units Per Carton	List Price
M828A	80	5.5	4	**$17.70**

DAMPER REGULATOR PACKAGES

These Damper Regulator Packages offer the comfort and convenience of automatic control for hand-fired furnaces. The quiet "fail safe" M828A Damper Motor operates the draft and check dampers of the furnace in answer to the temperature needs. The built-in transformer in the motor simplifies connecting it to a power line by plugging into a "live" outlet. The built-in return spring and side mounting bracket (adjustable in a full circle around the motor) make it easy to locate and mount. A chain, pulleys, thermostat cable, and insulated staples are included in each set.

A limit control, such as the LA419 Airstat for warm air, the LA409A for hot water, or the P404A for steam, is recommended and should be ordered separately.

The Y219A Damper Regulator Package contains:
1. T824A Thermostat. 2. M828A Damper Motor. 3. Accessories.

The Y228A Damper Regulator Package contains:
1. TM850A Chronotherm. 2. M828A Damper Motor. 3. Accessories.

Type	Weight	Per Carton	List Price
Y219A	6.5 lb.	4 sets	**$24.20**
Y228A	10 lb.	4 sets	**53.60**

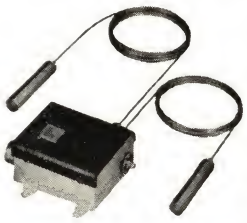
The Y229A Damper Regulator Package contains:
1. TM81C Manual Thermostat. 2. M828A Damper Motor. 3. Accessories.

The Y231A Damper Regulator Package contains:
1. TM801A Comfort Time-O-Stat. 2. M828A Damper Motor. 3. Accessories.

Type	Weight	Per Carton	List Price
Y229A	7.5 lb.	4 sets	**$29.10**
Y231A	7.5 lb.	4 sets	**37.80**

MINNEAPOLIS-HONEYWELL REGULATORS

T418B OUTDOOR RESET CONTROL



The T418B Outdoor Reset Control is designed for warm air and hot water heating applications. One remote bulb measures outdoor temperature while the other bulb is located at the control point in the heating plant. On hot water applications this is a point in the boiler where highest temperatures can be sensed. On warm air installations, it is in the plenum or supply duct. As the outdoor temperature changes, the temperature in the boiler or plenum is raised or lowered according to a fixed ratio. The T418B is used especially in panel heating systems.

Element Length: Indoor—20 ft.—Outdoor—40 ft.

Mercury Switch: AS452A.

When ordering specify (1) type number, (2) ratio.

Rating in Amperes Running Current: 115 volts A.C.—7.4. 230 volts A.C.—5.1.

Type	Series	Control Ratio	Wt. Lbs.	Std. Cart.	Price Each
T418B	40	1 to 1 1½ to 1 1 to 1½	4.5	1	**$34.20**

Selection of Ratio for Outdoor Reset Control

Outdoor Design Temp. (F.)	Design Heating—Medium Temp. 100	120	140	160	180	200
50	1:1½	.....	.....	.....	.....	.....
30	1½:1	1:1	1:1½	.....	.....	.....
10	.....	1½:1	1:1	1:1½	.....	.....
0	.....	1½:1	1:1	1:1	1:1½	.....
−10	.....	.....	1½:1	1:1	1:1½	1:1½
−20	.....	.....	1½:1	1:1	1:1	1:1½
−30	.....	.....	1½:1	1:1	1:1	1:1

ELECTRONIC CYCLOTROL* SYSTEM

This is a complete package containing everything necessary for quick and easy installation. It contains a W128A Cyclotrol Panel, a 17001A Outdoor Thermostat and fittings. To install, simply mount the thermostat outdoors, run two low-voltage wires to the panel in the boiler room, and connect the panel to the burner controls or valves. This electronic system controls indoor temperature by measuring outdoor temperature. The Y215A provides for automatic night shutdown and automatic, variable morning pick-up. It is adaptable to gas, oil or stoker heating systems.

Cycler Timing: 4½ minute standard. Plug-in cyclers with 2½, 1, 7½ and 10 minute timings are also available.

Voltage and Frequency: 115 or 230 volts, 60 cycles standard.

Special Features Available: 115 or 230 volts, 25 cycles available at **$5.30** list extra.

When ordering specify (1) type number, (2) voltage and frequency, (3) cycler timing (if other than standard).

Type	Wt. Lbs.	Std. Cart-	Price Each
Y215A	29.5	1	**$100.00**

*Trade mark.

MINNEAPOLIS-HONEYWELL REGULATORS

TYPE S403 TIME-O-SWITCH
(Attic Fan Timer)



The Type S403A is a line voltage timing device which was designed primarily to control the operation of attic fans, store lights, or other electrical equipment where the current supply is to be turned off after some predetermined interval of time has elapsed.

The timer may be set to close the circuit for any period of time from one half to eleven hours, merely by twisting the knob on the front of the timer until the desired time interval appears on the dial. A twist of the knob in the opposite direction will turn off the current supply at any time, should this become necessary.

Provision is also made to permit turning "on" the switch indefinitely. Merely depress the small lever on the side of the case and the switch will be placed in the "on" position until it is manually turned "off."

The important features of this device include the well known Con-Tac-Tor mercury switch and facility for mounting so that either concealed or exposed wiring may be used. This latter feature makes the timer easily adaptable for use on old or new installations.

The Time-O-Switch can be located at any point that is convenient for wiring, operation, etc. In general, locating the instrument about 5 feet above the floor will prove more satisfactory. The Controller must always be mounted in a vertical upright position with the top of the case horizontal.

Specifications

Type—
S403A Time-O-Switch—(line voltage timer) "closes" the circuit for an adjustable period of time (from ½ to 11 hours), manual "on" lever.

Rating In Amperes

	115 Volts		230 Volts	
	Running Current	Locked Rotor	Running Current	Locked Rotor
A.C.	7.4	44.4	5.1	30.6
D.C.	2.4	24.0	1.2	12.0

Finish—Silver-bronze.

Timing Limits—½ hour to 11 hours.

Dimensions—Height 5½ inches, width 3¼ inches, Depth 2⅝ inches.

Mounting Means—Standard switch box, or wall mounting. Knockout for Xtensionduct (wire mould).

When Ordering Specify—
1. Type Number.

Type	Description	*Shpg. Wt. Lbs.	Price Each
S403A	Time-o-Switch	3	**$11.80**

*Single unit weight shown. Quantity shipment weights will be proportionately lower.

MINNEAPOLIS-HONEYWELL REGULATORS

TYPE S610A DA-NITE SWITCH*



The S610A is an electrically operated time switch designed to automatically "break" one circuit and "make" another at a predetermined time. Using the S610A, Weatherstat systems can provide lowered night temperature or complete night shutdown. It can also be used to control outdoor advertising, floodlights, displays and other types of electrical equipment requiring daily S.P.-S.T. or S.P.D.T. switching action

Voltage and Frequency: 115 volts, 60 cycle standard.

Dimensions: Height 6¼ inches, width 3¾ inches, depth 4½ inches.

Special Features Available: Special voltages and frequencies; 115 volts, 25 or 50 cycles, 230 volts, 25, 50 or 60 cycles at **$2.60** list extra. When ordering specify (1) type number (2) voltage and frequency.

Type	Series	Rating in Amps.—Running Current 115V.	230V.	Wt. Lbs.	Std. Cart.	Price Each
S610A	60	AC 7.4	AC 3.7	4.2	10	**$27.80**
		DC 2.0	DC 1.0			

*Trade Mark.

TYPE C7003A PHOTOCELL MOUNT



The C7003A Photocell Mount is a flame-sensing element for use in electronic combustion safeguard control systems. It is suitable for commercial or industrial oil burner applications where the Photocell cannot be mounted in the oil burner draft tube. The C7003A is used with electronic relays such as the R178, R187A and R7223A. The maximum permissible ambient temperature (at photocell) is 165 F.

Type	Wt. Lbs.	Std. Cart.	Price Each
C7003A	3.25	1	**$33.60**

TYPE R7023A FLAME DETECTOR RELAY



The R7023A is an electronic relay for use with a photocell or flame electrode (or both) as a combustion safety control. It is especially adapted for use with the R161A or the R161B Protecto-relay, wherever the control sequence of the Protectorelay is suited to the application. Either of these relays when used with the R7023A assures a safe start on each cycle.

Voltage and Frequency: 115 volts, 60 cycle standard.

Dimensions: Approximately 5x5x5¼ inches.

Special Features Available: 230 volts, 60 cycles at **$5.30** list extra.

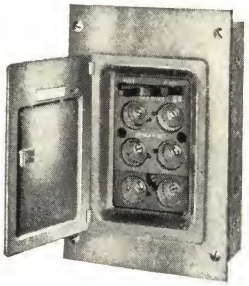
When ordering specify (1) type number (2) voltage and frequency.

Type	Wt. Lbs.	Std. Cart.	Price Each
R7023A	5.25	4	**$51.90**

FEDERAL NOARK SERVICE EQUIPMENT

FRONT OPERATED TOGGLE SWITCHES

For Entrance and Load Side Service
Wiring Sequence: Meter—Switch—Fuse
125 Volts and 125-250 Volts A.C.—Solid Neutral



No. 29L4F

FUSIBLE MAIN SWITCHES

In one complete unit these devices provide a main switch and both main and branch fuses. Full clearance for tamper-proof fuses.

30 Amp. switches have line terminals to take No. 6 wire.

Finish: Gray enamel.

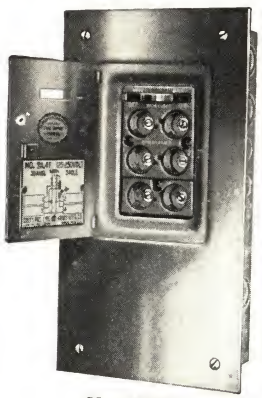
Surface Mounting

Cat. No.	Amps.	Poles	Main Fuses	Branch Fuses 15 Amp.	Wt. Lbs. Each	List Price
29L4	30	3	2	4	8	**$12.78**
29L6	30	3	2	6	10	**18.28**
29L8	30	3	2	8	12	**26.34**
***30L2**	30	2	1	2	10	**11.68**
***30L4**	30	2	1	4	10½	**13.50**
***31L2**	30	3	2	2	11	**12.78**
***31L4**	30	3	2	4	11½	**14.58**
***31L6**	30	3	2	6	13	**20.08**
***31L8**	30	3	2	8	14½	**28.14**
Flush Mounting						
29L4F	30	3	2	4	8	**13.78**
29L6F	30	3	2	6	10	**19.36**
29L8F	30	3	2	8	12	**27.38**
***30L2F**	30	2	1	2	10	**12.78**
***30L4F**	30	2	1	4	10½	**14.58**
***31L2F**	30	3	2	2	11	**13.50**
***31L4F**	30	3	2	4	11½	**15.48**
***31L6F**	30	3	2	6	13	**21.18**
***31L8F**	30	3	2	8	14½	**29.18**

FUSELESS MAIN SWITCHES

Fuseless Main Switches with up to 6 branch circuits are now approved by the National Electric Code and listed by the Underwriters' Laboratory. Brackets form enclosure for Bell Transformer.

Finish: Gray enamel finish.



No. 35N6F

Surface Mounting

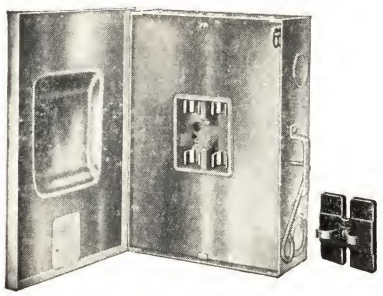
Amp.	Pls.	Branch Fuses 15 Amp.	Surface Mounting Cat. No.	Wt. Lb.	List Price	Flush Mounting Cat. No.	Wt. Lb.	List Price
30	2	2	**32N2**	8½	**$10.70**	**32N2F**	8½	**$11.68**
30	2	4	**32N4**	8½	**12.84**	**32N4F**	9	**15.24**
30	3	2	**33N2**	8½	**10.64**	**33N2F**	8½	**11.52**
30	3	4	**33N4**	8½	**12.08**	**33N4F**	9	**12.08**
30	3	6	**33N6**	9	**13.50**	**33N6F**	9½	**13.50**
30	2	4	***34N4**	8½	**17.50**	***34N4F**	8½	**19.04**
30	3	4	***35N4**	9	**17.50**	***35N4F**	9	**19.04**
30	3	6	***35N6**	10	**19.04**	***35N6F**	10	**20.46**

*Have transformer bracket.

FEDERAL NOARK SERVICE EQUIPMENT

SIDE OPERATED SWITCHES

For Entrance and Load Side Service
Wiring Sequence: Meter—Switch—Fuse
125 Volts and 125-250 Volts A.C.
Non-Meter Test—Solid Neutral (Insulated)
ACCESSIBLE MAIN FUSES



No. 7636-S

Single Phase and Direct Current Service

Cat. No.	Amps.	Poles	Main Fuse	Sw. Bld	Rge. Fuse Car.	Lgt. Fus. Plug	Wt. Lb. Each	List Price
8343-S	30	2	1 Plug	1	--	--	7½	**$10.20**
8323-S	30	3	2 Plug	2	--	--	8	**10.96**
8343-2	30	2	1 Plug	1	--	2	11	**13.16**
8343-4	30	2	1 Plug	1	--	4	12	**14.60**
8323-2	30	3	2 Plug	2	--	2	11	**14.60**
8323-4	30	3	2 Plug	2	--	4	12	**17.50**
7636-S	60	3	2	2	--	--	12	**13.16**
7936L2	60	3	2	2	--	2	13	**17.50**
7936L4	60	3	2	2	--	4	13½	**17.50**
7936RL4	60	3	2	2	2	4	21	**26.34**
7936RL6	60	3	2	2	--	6	21½	**29.18**
7936RL8	60	3	2	2	2	8	22½	**40.60**

TROUGH TYPE TEST DEVICES

With Removable Side Walls for Banking

These meter channels are for use with meters having standardized terminal chambers. Plain covers are held at top by two studs, at bottom by a service seal. Blocks have clamp type test links and circuit can be opened at two points on each block.

Cat. No.	Amps.	Volts	Wire	Test Links	Wt. Lb. Each	List Price
SB11-1	30-60	125-250	3	2	7⅛	**$8.22**
SB11-2	30-60	125-250	3	4	7¼	**9.98**

Prices include side walls.

ACCESSORIES

For Trough Type Test Devices

Cat. No.	Description	List Price
SB7	Coupling starp	**$0.70**
IEW6R	Right hand endwall	**.60**
IEW6L	Left hand endwall	**.60**

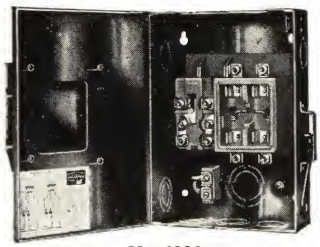
FEDERAL NOARK SERVICE EQUIPMENT

FOR ENTRANCE AND METER SERVICE ACCESSIBLE MAIN FUSES

Wiring Sequence Switch—Meter—Fuse

125-250 Volts and 230 Volts A.C.

Meter Test—Solid Neutral (Insulated)



No. 6936

Single Phase and Polyphase

Cat. No.	Amp.	Poles	Main Fuse	Sw. Bld.	Range Car.	Lighting Fuses Plug	Wt. Lb.	List Price With Endwall
*6623	30	2	1	1	..	..	8	$13.16
*6933	30	3	2	2	..	..	9	11.20
6936	60	3	2	2	..	..	12	18.65
¶6936RL4	60	3	2	2	2	4	21½	33.50
¶6936RL6	60	3	2	2	2	6	24½	37.85
6946	60	4	3	3	..	..	17	54.86
6931	100	3	2	2	..	..	25½	33.50
6932	200	3	2	2	..	..	40	109.74

Wiring Sequence: Switch-Fuse-Meter
Single Phase and Direct Current

Cat. No.	Amp.	Volts	Poles	Fuses	Sw. Bld.	Wt. Lb.	Price With Endwall
9323	30	125–250	3	2 Plug	2	7¾	$11.90
†9323–4	30	125–250	3	2 Plug	2	14¼	24.80
9333	30	125–250	3	2 Encl.	2	7¾	15.48
9343	30	125	2	1 Plug	1	7¾	11.90
‡66336	60	125–250	3	2 Encl.	2	20	28.55
‡66331	100	125–250	3	2 Encl.	2	36	48.65

Polyphase—230 Volts

§67033	30	230	3	3 Encl.	3	11½	40.60
68143	30	230	4	3 Encl.	3	11½	52.68
§67036	60	230	3	3 Encl.	3	20	44.30
68146	60	230	4	3 Encl.	3	20	50.80
§67031	100	230	3	3 Encl.	3	36	84.30
68141	100	230	4	3 Encl.	3	36	101.60

The upper end walls of above switches are equipped with shutters containing standardized meter terminal chamber knockouts.

*Plug Fuses. †Switch wired to two or four circuit attachments. ‡Also 230 volts, A.C. §No neutral.

¶Grounded Solid Neutral; insulated neutral furnished when specified.

Neutral furnished when specified.

FEDERAL NOARK SERVICE EQUIPMENT

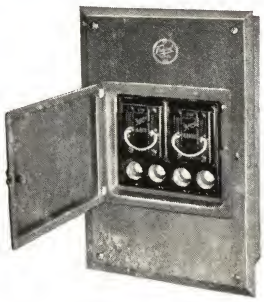
MAIN AND RANGE PULLOUT SWITCHES

For Entrance and Loadside Service

Sequence: Meter—Switch—Fuse



No. 264



No. 464

60 Amperes, 125-250 Volts AC

Solid Neutral—Fusible Mains

Mains Poles	Mains Fuses	Fuse Puller 60 A. 3P SN	Plug Fuse Branch Circuit	Mounting Surface Cat. No.	Mounting Flush Cat. No.	List Price
3	2	1	..	260	460	$16.46
3	2	1	2	262	462	16.46
3	2	1	4	264	464	12.80
3	2	1	4	264C	464C	12.80
3	2	1	6	266	466	19.80
3	2	1	6	266C	466C	19.80
3	2	1	8	268	468	26.40
3	2	1	8	268C	468C	26.40
		Non-Fusible Mains				
3	0	1	4	564	964	13.48

RAINTIGHT ENCLOSURES



No. ER264C

Catalog number and suffix "C" arranged for main and range fuses in multiple. Main lugs are 100A size. Main switch controls lighting circuits only.

Puller heads for 30A fuses furnished when specified.

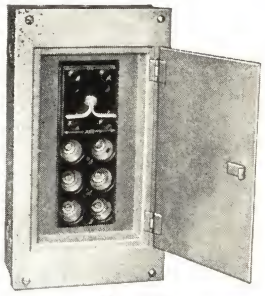
Cat. No.	Amps.	Mains Poles	Mains Fuses	Fuse Puller Br. 60A. 3P SN	Plug Fuse Br. Cir.	Wt. Lb. Each	List Price
R260	60	3	2	1	..	13	$30.25
R262	60	3	2	1	2	13	24.00
R264	60	3	2	1	4	14	19.55
R264C	60	3	2	1	4	15	19.55
R266	60	3	2	1	6	23	34.00
R266C	60	3	2	1	6	23	35.00
R268	60	3	2	1	8	24	37.80
R268C	60	3	2	1	8	24	38.90
			Non-Fusible Mains				
R564	60	3	0	1	4	15	22.40

FEDERAL NOARK SERVICE EQUIPMENT

†60 AMP. PULLOUT HEAD SWITCHES

3 Pole S/N—Insulated Groundable

125-250 Volts—Solderless Connectors



No. 166

Surface Mounting

60 A. Poles	Fuses	Br. Cir.	Cat. No.	List Price
3SN	2	--	160	$10.10
3SN	2	2	162	12.20
3SN	2	4	164	12.60
3SN	2	6	166	15.70
3SN	2	8	168	22.30
3SN	0	6	*63–N6GN	16.46

Flush Mounting

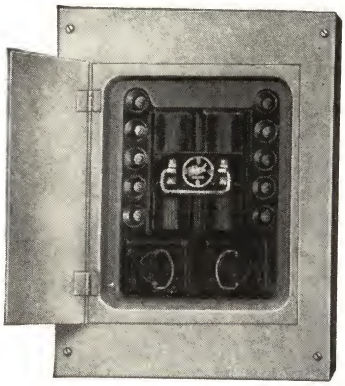
3GN	2	--	360	10.10
3GN	2	2	362	12.20
3GN	2	4	364	12.60
3GN	2	6	366	15.70
3GN	2	8	368	22.30
3GN	0	6	*63–N6GNF	16.46

*Grounded Neutral.

100 AMP. MAINS

With 60 amp. range and water heater branches and ten 15 amp. plug fuse branch circuits. Solderless connectors.

Standard Finish: Gray enamel.



No. 12610S

Cat. No.	Enclosures	100A Mains Poles	Fuses	Fuse Fuller Br. 60A SP SN	Plug Fuse Br. Cir.	List Price
12610S	Surface	3	2	2	10	$52.00
12610F	Flush	3	2	2	10	52.00

RAINTIGHT ENCLOSURE



No. ER160

Cat. No.	60A Mains Poles	Fuses	Plug Fuse Br. Cir.	List Price
R160	3SN	2	--	$14.05
R162	3SN	2	2	18.00
R164	3SN	2	4	18.65
R166	3SN	2	6	22.60
R168	3SN	2	8	28.50

†100 AMP. PULLOUT HEAD SWITCHES

3 Pole S/N—125-250 Volts

Cat. No.	Enclosure	100A. Mains Poles	Fuses	Wt. Lbs. Each	List Price
110	Surface	3SN	2	14	$23.80
310	Flush	3SN	2	13	23.80
R110	Raintight	3SN	2	17	26.70

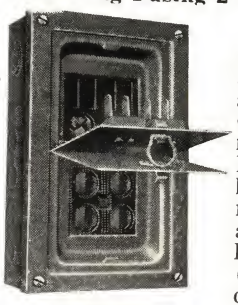
†Puller heads for 30 amp. N.E.C. fuses furnished when specified.

FEDERAL NOARK SERVICE EQUIPMENT

MAIN SERVICE AND LIGHTING PANELS
30 AMPERE DOOR OPERATED SWITCHES

125 Volts and 125-250 Volts AC

For Plug Fusing 2 and 3 Pole Solid Neutral



No. 833B4

Cabinets have an ample supply of knockouts arranged to line up with surface type Branch Circuit Cabinets. A special arrangement of ½-inch and ¾-inch knockouts, in top, bottom, both sides and back of cabinets, allow for every arrangement of service, load, and ground conduit. (This special arrangement of knockouts eliminates the use of bonding bushings.)

Surface Mounting*

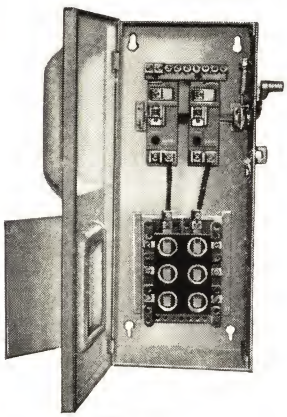
Cat. No.	Volts	Mains Poles	Bl.	Fus.	Br. Cir.	Wt. Lb. Each	List Price
831B2	125	2SN	1	1	1	7⅜	$ 8.20
831B4	125	2SN	1	1	4	7⅜	10.50
833B2	125–250	3SN	2	2	2	7⅜	10.90
833B4	125–250	3SN	2	2	4	7⅜	12.40
831B2NF	125	2SN	1	0	2	7⅜	16.08
831B4NF	125	2SN	1	0	4	7⅜	16.80
833B2NF	125–250	3SN	2	0	2	7⅜	16.08
833B4NF	125–250	3SN	2	0	4	7⅜	16.80

*Flush type cabinets are available, add $2.80 to above list prices.

SIDE OPERATED SEALED FUSE ENTRANCE SWITCHES WITH BRANCH CIRCUITS

125 and 125-250 Volts
2 and 3 Pole—Insulated Neutral

30 and 60 Ampere



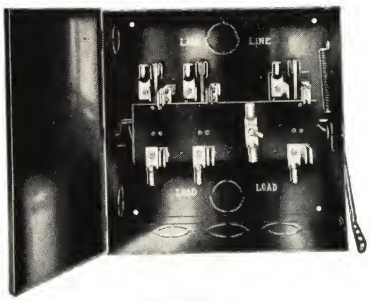
No. 63-6

Cat. No.	Volts	Amp.	Mains Poles	Bl.	Fuse	Plug Fuse Br. Cir.	Wt. Lbs. Each	List Price
C32-2	125	30	2SN	1	1	2	8	$10.08
C32-4	125	30	2SN	1	1	4	9	12.84
M32-2	125	30	2SN	1	1	2	8	10.08
M32-4	125	30	2SN	1	1	4	9	12.84
C33-2	125–250	30	3SN	2	2	2	8	11.96
C33-4	125–250	30	3SN	2	2	4	9	14.60
M33-2	125–250	30	3SN	2	2	2	8	11.96
M33-4	125–250	30	3SN	2	2	4	9	14.60
63-2	125–250	60	3SN	2	2	2	14	17.50
63-4	125–250	60	3SN	2	2	4	14	19.26
63-6	125–250	60	3SN	2	2	6	14	23.36

Prefix "M" indicates meter endwall.

FEDERAL NOARK SERVICE EQUIPMENT

ENTRANCE SWITCHES
ACCESSIBLE MAIN FUSES



No. 76244

Single-Phase and Direct Current

125-250 Volts

Solid Neutral (Insulated) Solderless Connectors

Cat. No.	Amps.	Poles	Fuses	Switch Blades	Wt.Lb. Each	List Price
† 8343	30	2	2		8¾	$12.46
* 8323	30	2	2		8¾	13.88
8333	30	2	2		9	15.48
7636	60	2	2		11	23.80
7631	100	2	2		16	37.85

3 Phase—3 Wire—230 Volts A.C.—Fusible

77033	30	3	3	11½	32.92
77036	60	3	3	20	45.00
77031	100	3	3	36	73.52

3 Phase—4 Wire—230 Volts A.C.—Fusible
Solid Neutral (Insulated)

77143	30	3	3	11½	40.60
77146	60	3	3	20	48.28
77141	100	3	3	36	87.80
‡76242	200	3	3	48	170.12
‡76244	400	3	3	145	289.74

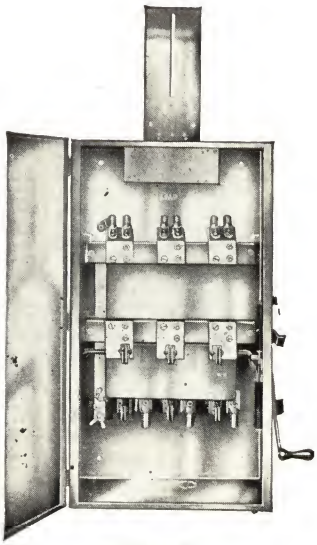
*Plug fuses.

†2 pole, 125 volts, 1 Plug Fuse, Solid Neutral.

‡Quick-make and quick-break. Also rated 230 volts A.C.

BRING YOUR ELECTRICAL
PROBLEMS TO US AND
LET OUR SPECIALISTS
HELP TO SOLVE
THEM FOR YOU.

FEDERAL NOARK SERVICE EQUIPMENT



No. 75547T

CURRENT TRANSFORMER AND ENTRANCE SWITCHES

Accessible Fuse Covers

Quick Make and Quick Break

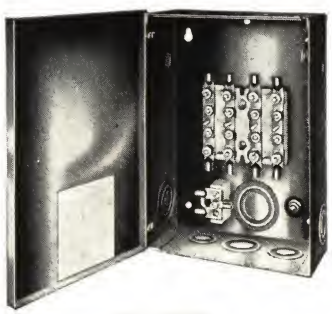
Solid Insulated Groundable Neutral

125-250 Volts or 230 Volts AC

Cat. No.	Amps.	Blades	Fusible Legs		Wt. Lbs. Each	List Price
75532T	200	3SN	2	2	205	$270.00
75592T	200	3	3	3	223	270.00
75542T	200	4SN	3	3	220	277.68
75534T	400	3SN	2	2	260	387.42
75594T	400	2	3	3	280	387.42
75544T	400	4SN	3	3	295	401.70
75537T	600	3SN	2	2	360	481.82
75597T	600	3	3	3	360	481.82
75547T	600	4SN	3	3	380	496.08
*75538T	800	3SN	2	2	460	738.64
*75598T	800	3	3	3	460	738.64
*75548T	800	4SN	3	3	500	752.92
*75539T	1200	3SN	2	2	625	957.06
*75599T	1200	3	3	3	625	957.06
*75549T	1200	4SN	3	3	670	972.42

*Two blades and two fuses in parallel each pole.

ENCLOSED METER CONNECTION BLOCKS



No. 9426K

Cat. No.	Amps.	Volts	Wire	Test Links	Wt. Lb. Each	List Price
9453–4	30	250	2-3	2	7½	$11.68
9453	30	575 AC	2-3	4	7¾	14.60
9426-K	60	250	2-3	4	9	11.90
9446	60	250	3-4	6	26½	27.78
9456	60	575 AC	2-3	4	16¾	24.78
9491	100	250	3-4	6	27	31.82
9481-K	100	250	2-3	4	9	29.18
9451	100	575 AC	2-3	4	27	27.78

FEDERAL NOARK MULTI-BREAKERS

Type "M"—Service and Load Centers

For Use on A.C. Systems Only



Type "MO"

MAINS

Insulated (Groundable) Solid Neutral — Underwriters approved for use as a load center beyond the service equipment or as service equipment where required.

No Neutral—Underwriters approved as Enclosed Circuit Breaker but suitable for use as Service Equipment.

M —2 Breaker Poles, Separate Trip.

M0—2 Breaker Poles, Separate Trip.

M1—3 Breaker Poles, Common Trip.

M2—2 and 3 Breaker Poles, Common Trip.

Standard Finish: Gray Enamel

BRANCHES

Lighting Circuits—2 wire S/N 115 V. A.C. Single Pole Breakers and Neutral.

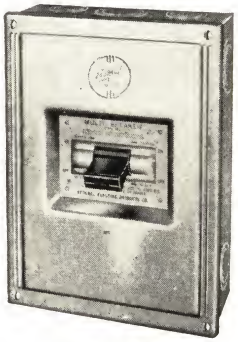
Range, Water Heater and Sub-feed Circuits—

3 wire S/N 115/230 V. A.C. 2 Pole Breakers and Neutral.

4 wire S/N 115/230 V. A.C. 1 Pole Breakers and Neutral.



Type "M"



Type "M-2"

Specify Flush or Surface Mounting by Adding "F" or "S" to Catalog Number

Form of Breaker and Frame Size	*No. of Mains or Branch Circuits 1 Pole Breakers	2 Pole Breakers	Insulated (Groundable) Solid Neutral Cat. No.	List Price	Box No.	Solid Mains Rating
2 Wire S/N 120 Volts A.C.						
M0 25A Frame	1-15A	0	131110	$ 4.12	13	35A (Max.)
	1-20A	0	131120	4.12	13	
	1-25A	0	131130	4.12	13	
	2-15A	0	131711	6.20	13	
	2-20A	0	131722	6.20	13	
	2-25A	0	131733	6.20	13	
	1-15A 1-20A	0	131712	6.20	13	
M 50A Frame	1-15A	0	16501	9.26	23	50A (Max.)
	1-20A	0	16502	9.26	23	
	1-25A	0	16503	9.26	23	
	1-35A	0	16504	9.26	23	
	1-50A	0	16505	9.26	23	
	2-15A	0	16611	10.97	23	
	2-20A	0	16622	10.97	23	
	2-25A	0	16633	10.97	23	
	2-35A	0	16644	10.97	23	
	2-50A	0	16655	10.97	23	
	1-15A 1-20A	0	16612	10.97	23	
3 Wire S/N 120/240 Volts A.C.						
M0 25A Frame	0	1-15A	131611	6.20	13	35A (Max.)
	0	1-20A	131622	6.20	13	
	0	1-25A	131633	6.20	13	
	2-15A	0	131711	6.20	13	
	2-20A	0	131722	6.20	13	
	2-25A	0	131733	6.20	13	
	1-15A 1-20A	0	131712	6.20	13	
M 50A Frame	0	1-10A	16766	11.58	23	50A (Max.)
	0	1-15A	16711	11.58	23	
	0	1-20A	16722	11.58	23	
	0	1-25A	16733	11.58	23	
	0	1-35A	16744	11.58	23	
	0	1-50A	16755	11.58	23	
	2-15A	0	16611	10.97	23	70A (Max.)
	2-20A	0	16622	10.97	23	
	2-25A	0	16633	10.97	23	
	1-15A 1-20A	0	16612	10.97	23	
	3	0	35530	18.70	3	
	4	0	35540	20.52	3	
	1	1	35511	18.70	3	
	2	1	35521	22.34	3	
	0	2	35502	22.34	3	
	5	0	95550	31.82	9	3-50A (Max.)
	6	0	95560	32.92	9	
	3	1	95531	32.92	9	
	4	1	95541	35.12	9	
	1	2	95512	32.92	9	
	2	2	95522	35.12	9	
	0	3	95503	36.20	9	
M2 100A Frame	0	1-50A	333250	36.20	33	100A (Max.)
	0	1-70A	333270	36.20	33	
	0	1-100A	333216	36.20	33	

*Where ampere ratings are not shown on M-50A Frame Breakers, any capacity from 15 to 50A can be furnished.

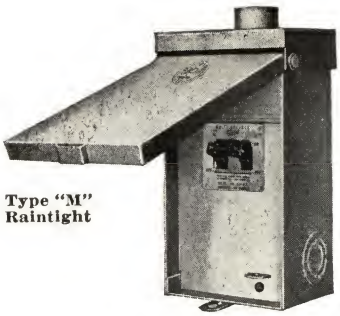
IMPORTANT—Specify branch circuit ratings and type of mountings.

For Flush devices add "F" to catalog number.

For surface devices add "S" to catalog number.

RAINTIGHT ENCLOSURES CAN BE FURNISHED.

FEDERAL NOARK MULTI-BREAKERS

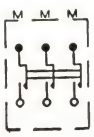


Type "M" Raintight

Type "M" (Continued)

	Form of Breaker and Frame Size	No. of Main or Branch Circuits	Double Pole Breakers	No Neutral *Catalog Number	No Neutral List Price	No Neutral Box No.	Solid Mains Rating
2 Wire 120/240 Volts A.C.							
	M0 25A Frame	0	1-15A	111611	$ 5.70	11	35A (Max.)
			1-20A	111622	5.70	11	
			1-25A	111633	5.70	11	
	M 50A Frame	0	1-10A	16966	10.97	21	50A (Max.)
			1-15A	16911	10.97	21	
			1-20A	16922	10.97	21	
			1-25A	16933	10.97	21	
			1-35A	16944	10.97	21	
			1-50A	16955	10.97	21	
	M2 100A Frame	0	1-50A	313250	‡32.92	31	100A (Max.)
			1-70A	313270	‡32.92	31	
			1-100A	313216	‡32.92	31	

*For flush devices add "F" to Cat. No. For surface devices add "S" to Cat. No. Raintight enclosures can be furnished. ‡Prices shown on 100A Frame Breakers are for surface mounting. For flush mounting use "F" after the Cat. No. and add $3.50 to the list price.

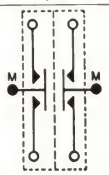
	Frame Size		Three Pole Breakers	Insul. Groundable Neutral Cat. No.	Insul. Groundable Neutral List Price	Insul. Groundable Neutral Box No.	Solid Mains Rating
3 Phase 4 Wire S/N 120/208 Volts							
	M1 50A Frame		1-15A	282315	$34.00	28	50A (Max.)
			1-20A	282320	34.00	28	
			1-25A	282325	34.00	28	
			1-35A	282335	34.00	28	
			1-50A	282350	34.00	28	
	M2 100A Frame		1-50A	333350	54.00	33	100A (Max.)
			1-70A	333370	54.00	33	
			1-100A	333316	54.00	33	



Type "MO4"

Type M0 4 Multi-Breaker—Thermal Magnetic

3 Wire S/N 120/240 Volts A.C. Insulated Groundable Neutral



Lighting or Appliance Circuits 120 Volts A.C. Single Pole	Catalog Number	List Price	Main Rating	Box Number
4-15 Amp.	181111	$13.29		18
4-20 Amp.	182222	13.29		18
4-30 Amp.	183333	13.29	50	18
3-15, 1-20 Amp.	181112	13.29	Amp.	18
3-15, 1-30 Amp.	181113	13.29	Max.	18
2-15, 2-20 Amp.	182211	13.29		18
2-15, 2-30 Amp.	183311	13.29		18

For double pole 240 volt or 120/240 volt A.C. circuits of like capacity poles, insert handle tie, furnished with each device. Additional Handle Ties available.
Add S after catalog number for Surface mounting.
Add F after catalog number for Flush mounting.

WATER HEATER CONTROL

For Use on 3-Wire S/N 120-240 Volts A.C. Systems

Provides over current protection and disconnecting means to complete water heater circuit.



No. 191611S

Form of Breaker and Frame Size	No Neutral 2-Pole Breaker	No Neutral Cat. No.	No Neutral Box No.	Approx. Wt., Lbs.	Solid Mains Rating	List Price
2 Mo	2-15A	191611F	19	4½		$14.70
	2-15A	191611S	19	4½		14.70
Units	2-20A	191622F	19	4½	40A	14.70
25 A	2-20A	191622S	19	4½	Max.	14.70
Frame	2-25A	191633F	19	4½		14.70
	2-25A	191633S	19	4½		14.70

*Available in any combination of 15, 20, 25 Ampere breakers. Suffix "S" indicates surface devices. Suffix "F" indicates flush devices.

IMPORTANT—Specify 15, 20, 25, 35 or 50 Amp. one pole or two pole branch circuits desired for each catalog number ordered.

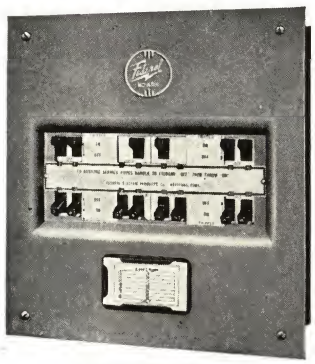
FEDERAL NOARK MULTI-BREAKERS

Type "MB" Service and Load Centers

SEPARATE TRIP



1 to 8 Circuit



9 to 16 Circuit

Standard Finish: Gray Enamel

For Service Equipment where six circuits or less are permitted without use of a separate service device and for general lighting control from 2 to 16 circuits in place of panelboards. Other combinations with 15, 20, 25, 35 and 50 ampere breakers available. Use catalog number without suffix and specify ampere ratings required.

List prices shown for each Catalog Number remain the same regardless of suffix numbers.

Specify Flush or Surface Mounting

For 3-Wire S/N 120/240 Volt A.C. Systems

Main Amperes	No. and Capacity 1 Pole Breakers	No. and Capacity 2 Pole Breakers	Insulated Groundable Neutral Catalog No.	List Price	Box No.
70	4-15A 3-15A 1-20A 5-15A		35040-01 35040-21 35050-01	$18.12 18.12 21.34	3 3 3
	6-15A 7-15A 8-15A		35060-01 35070-01 35080-01	24.14 25.94 29.58	3 3 3
70	1-15A 2-15A 2-15A	1-15A 1-35A 1-50A	35011-11 35021-41 35021-51	18.12 18.12 18.12	3 3 3
	3-15A 4-15A 4-15A	1-50A 1-35A 1-50A	35031-51 35041-41 35041-51	21.34 24.14 24.14	3 3 3
	2-15A 2-20A 3-15A 1-20A 3-15A 1-20A	1-35A 1-35A 1-50A	35041-47 35041-46 35041-56	24.14 24.14 24.14	3 3 3
	5-15A 6-15A	1-50A 1-15A	35051-51 35061-11	25.36 29.58	3 3
70	 1-15A 2-15A	1-20A 1-50A 2-15A 1-20A 1-35A	35002-52 35012-11 35022-46	18.12 21.34 24.62	3 3 3
	2-15A 3-15A 4-15A	1-20A 1-50A 1-25A 1-50A 1-20A 1-35A	35022-56 35032-57 35042-46	24.62 27.78 29.58	3 3 3
	4-15A 4-15A	1-25A 1-35A 1-20A 1-50A	35042-47 35042-56	29.58 29.58	3 3
70	 1-15A 2-15A	*3-15A *3-15A *3-15A	35003-10 35013-11 35023-11	24.62 27.78 29.58	3 3 3
70		*4-15A	35004-10	30.72	3

For 3-Wire S/N 120/240 Volt A.C. Systems

Main Amperes	No. and Capacity 1 Pole Breakers	No. and Capacity 2 Pole Breakers	Insulated Groundable Neutral Catalog No.	List Price	Box No.
100	9-15A 10-15A 11-15A		57090-01 57100-01 57110-01	$46.08 46.08 51.58	5 5 5
	12-15A 13-15A 14-15A		57120-01 57130-01 57140-01	51.58 69.14 70.24	5 5 5
	15-15A 16-15A		57150-01 57160-01	73.52 75.72	5 5
100	7-15A 8-15A 9-15A	1-15A 1-15A 1-15A	57071-11 57081-11 57091-11	46.08 46.08 51.58	5 5 5
	10-15A 11-15A 12-15A	1-15A 1-15A 1-15A	57101-11 57111-11 57121-11	51.58 69.14 70.24	5 5 5
	13-15A 14-15A	1-15A 1-15A	57131-11 57141-11	73.52 75.72	5 5
100	5-15A 6-15A 7-15A	2-15A 2-15A 2-15A	57052-11 57062-11 57072-11	46.08 46.08 51.58	5 5 5
	8-15A 9-15A 10-15A	2-15A 2-15A 2-15A	57082-11 57092-11 57102-11	51.58 69.14 70.24	5 5 5
	11-15A 12-15A	2-15A 2-15A	57112-11 57122-11	73.52 75.72	5 5
100	3-15A 4-15A 5-15A	3-15A 3-15A 3-15A	57033-11 57043-11 57053-11	55.96 57.06 61.46	5 5 5
	6-15A 7-15A 8-15A	3-15A 3-15A 3-15A	57063-11 57073-11 57083-11	62.56 69.14 70.24	5 5 5
	9-15A 10-15A	3-15A 3-15A	57093-11 57103-11	73.52 75.72	5 5
100	1-15A 2-15A 3-15A	4-15A 4-15A 4-15A	57014-11 57024-11 57034-11	55.96 57.06 61.46	5 5 5
	4-15A 5-15A 6-15A	4-15A 4-15A 4-15A	57044 11 57054-11 57064-11	62.56 69.14 70.24	5 5 5
	7-15A 8-15A	4-15A 4-15A	57074-11 57084-11	73.52 75.72	5 5
100	 1-15A 2-15A	*5-15A *5-15A *5-15A	57005-10 57015-11 57025-11	57.06 61.46 62.56	5 5 5
	3-15A 4-15A 5-15A	*5-15A *5-15A *5-15A	57035-11 57045-11 57055-11	69.14 70.24 73.52	5 5 5
	6-15A	*5-15A	57065-11	75.72	5
100	 1-15A 2-15A 3-15A	*6-15A *6-15A *6-15A *6-15A	57006-10 57016-11 57026-11 57036-11	62.56 69.14 70.24 73.52	5 5 5 5
	4-15A	*6-15A	57046-11	75.72	5
100	 1-15A 2-15A	*7-15A *7-15A *7-15A	57007-10 57017-11 57027-11	70.24 73.52 75.72	5 5 5
100		*8-15A	57008-10	75.72	5

For 3 Phase 4-Wire S/N 120/208 Volt A.C. Systems

70	9-15A 10-15A 12-15A		56090-01† 56100-01† 56120-01†	$59.26 60.36 63.64	5 5 5
	14-15A 16-15A		56140-01† 56160-01†	70.24 75.72	5 5

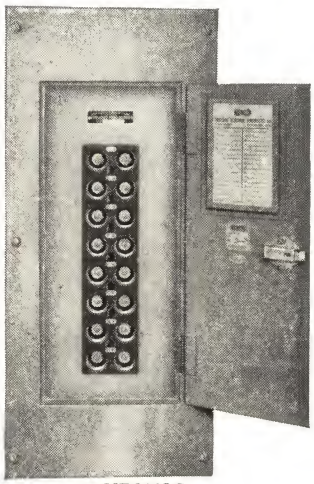
*Where more than two double pole circuits in Box No. 3 devices or more than four double pole in Box No. 5 devices as shown, this is accomplished by use of handle bales coupling outside single poles.

†For each additional double pole circuit substituted for 2-single pole circuits, in excess of four (4) double pole, add $0.40 list each.

FEDERAL NOARK PANELBOARDS

FEDERAL RESIDENCE PANELS

Type NR and Junior Type
With Bakelite Units



NR316LS

Mains: Lugs only—3 Wire Solid Neutral 125/250 Volts. 4 Wire, 3 Phase, 120/208 Volts.

Branches: 30 Ampere S.P. for Plug Fuses.

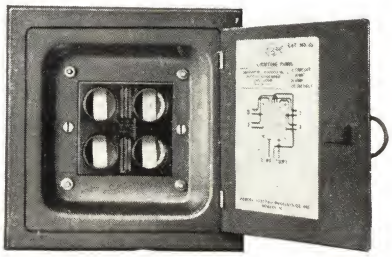
Box: Code Gauge Steel.

Front: Code Gauge Steel.

Hardware: Flush Steel Hinges. NR Type— Flush Spring Lock. Junior Type—Nickel Ring Handles.

Finish: Baked Gray Enamel.

FLUSH OR SURFACE MOUNTING



No. 4S

JUNIOR TYPE PANELBOARDS

Three Wire—Single Phase—125-250 Volt Mains

No. of Circuits	Catalog Number Flush	Catalog Number Surface	Mains Amp. Cap.	List Price	Box Dimensions Height	Box Dimensions Width	Box Dimensions Depth	Wt. Each
2	**2F**	**2S**	30	**$3.70**	5	6⅜	2½	2
4	**4F**	**4S**	35	**4.95**	7¼	7¼	2½	6
6	**6F**	**6S**	35	**8.30**	9⅜	7¼	2½	8
8	**8F**	**8S**	60	**11.30**	13	8	3	12
10	**10F**	**10S**	60	**16.65**	16	8½	3	16
12	**12F**	**12S**	60	**22.60**	16	8½	3	17

Four Wire—Three Phase—230 Volt Mains

6	**406F**	**406S**	30	**11.26**	11	7¾	2⅞	8
8	**408F**	**408S**	60	**15.34**	13	8	3	12
10	**410F**	**410S**	60	**22.72**	16	8½	3	16
12	**412F**	**412S**	60	**30.80**	16	8½	3	17

TYPE NR RESIDENCE PANELS

Three Wire—Single Phase—125-250 Volt Mains

14	**NR314LF**	**NR314LS**	100	**38.50**	23¾	10½	3½	35
16	**NR316LF**	**NR316LS**	100	**40.70**	23¾	10½	3½	38
18	**NR318LF**	**NR318LS**	100	**45.10**	25⅛	10½	3½	41
20	**NR320LF**	**NR320LS**	100	**47.30**	28⅛	10½	3½	44
22	**NR322LF**	**NR322LS**	100	**52.80**	28⅛	10½	3½	50
24	**NR324LF**	**NR324LS**	100	**57.20**	31⅛	10½	3½	54

Four Wire—Three Phase—230 Volt Mains

14	**NR414LF**	**NR414LS**	60	**38.50**	23¾	10½	3½	35
16	**NR416LF**	**NR416LS**	60	**40.70**	25⅛	10½	3½	38
18	**NR418LF**	**NR418LS**	60	**45.10**	28⅛	10½	3½	41
20	**NR420LF**	**NR420LS**	100	**47.30**	28⅛	10½	3½	44
22	**NR422LF**	**NR422LS**	100	**52.80**	31⅛	10½	3½	50
24	**NR424LF**	**NR424LS**	100	**57.20**	31⅛	10½	3½	54

FEDERAL NOARK PANELBOARDS

TYPES "NTPS3" AND "NTPS4" PANELBOARDS

With Switch and Plug Fuse Branches

Combination Flush and Surface Box

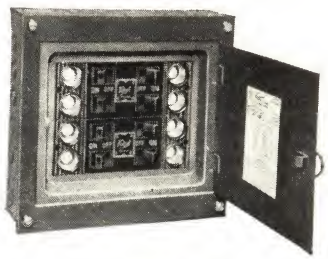
Bakelite Units with Heavy Duty Tumbler Switches

Lugs only Mains. Single Door Construction—Ring Spring Catch only. Locks cannot be furnished with this type.

Panel, Box, and Front complete, in individual carton.

In 4, 8, 12, 16 and 20 Circuits only. 1½-inch Wiring Gutters.

The Shallow Boxes (3⅝" Deep ID) provided for this line, permit Flush Type Panels to be mounted in thin walls composed of sheet rock, wall board, masonite, or similar material.



NTPS308

Mains: Lugs Only. Solderless Type

Branches: 30 Amp. S.P. Switches For Plug Fuses

3/2 Wire—125/250 Volts Solid Neutral

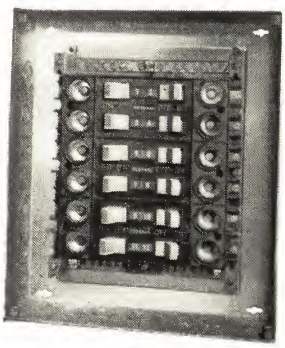
No. of Circuits	Main Amps.	Cat. No.	List Price	Weight Each	Box Dimensions (ID) High	Wide	Deep
4	30*	*NTPS304	$18.42	15	8	12½	3⅝
8	60	NTPS308	28.09	20	11	12	3⅝
12	60	NTPS312	54.32	25	15	12½	3⅝
16	100	NTPS316	72.88	32	20	12½	3⅝
20	100	NTPS320	88.78	39	23	12½	3⅝
3 Phase, 4 Wire—120/208 Volts Solid Neutral							
8	60	NTPS408	$41.08	20	11	12	3⅝
12	60	NTPS412	59.62	25	15	12½	3⅝
16	60	NTPS416	78.18	32	20	12½	3⅝
20	100	NTPS420	104.68	39	23	12½	3⅝

*NTPS304 is approved for use as service equipment.

TYPES "NTPR3 AND "NTPR4" PANELBOARDS

With Switch and Plug Fuse Branches

Bakelite Units with Heavy Duty Tumbler Switches



NTPR312L

Mains: 3 Wire, 125/250V. Solid Neutral. 3 Phase, 4 Wire, 120/208V. Solid Neutral.

Branches: 2 Wire, 125 Volt, 30 Amp. S.P. Switch for Plug Fuses.

Boxes: Code Thickness Steel, Galvanized Finish, 4-inch Gutters.

Fronts: Code Thickness Steel, Gray Finish, Flush Spring Locks. Flush Fronts Furnished Unless Surface Type Specified on Orders.

Size: All Panelboard Boxes are 4¼ Inches Deep 17 Inches Wide. Box Number Designates Height of Box.

Catalog Numbers and List Prices Include Complete Panel and Cabinet. No Fuses Included.

MAINS: LUGS ONLY (Solderless Type), SOLID NEUTRAL (Single Door Construction)

3/2 Wire, Solid Neutral

Number of Circuits	Mains Amp. Cap.	Cat. No.	Box No.	List Price
4	30	NTPR304L	H13¼	$47.70
8	60	NTPR308L	H16¼	56.98
12	60	NTPR312L	H19¼	70.22
16	100	NTPR316L	H22¼	104.68
20	100	NTPR320L	H28½	117.92
24	125	NTUR324L	H28½	143.10
28	200	NTPR328L	H40	156.34
32	200	NTPR332L	H40	170.92
36	200	NTPR336L	H46¼	197.42
40	200	NTPR340L	H46¼	213.32

3 Phase 4 Wire, Solid Neutral

Number of Circuits	Mains Amp. Cap.	Cat. No.	Box No.	List Price
8	60	NTPR408L	H16¼	$62.28
12	60	NTPR412L	H19¼	78.18
16	60	NTPR416L	H22¼	115.28
20	100	NTPR420L	H28½	140.44
24	100	NTPR424L	H28½	156.34
28	100	NTPR428L	H40	160.32
32	100	NTPR432L	H40	190.80
36	125	NTPR436L	H46¼	230.54
40	200	NTPR440L	H46¼	249.10

MAINS: FUSIBLE, SOLID NEUTRAL

4	30	NTPR304F	H16¼	80.82
8	60	NTPR308F	H22¼	91.42
12	60	NTPR312F	H28½	106.00
16	100	NTPR316F	H40	144.42
20	100	NTPR320F	H40	159.00
24	200	NTPR324F	H46¼	197.42
28	200	NTPR328F	H51	212.00
32	200	NTPR332F	H51	223.92
36	200	NTPR336F	H57	261.02
40	200	NTPR340F	H57	276.92

8	60	NTPR408F	H22¼	$102.02
12	60	NTPR412F	H28½	117.92
16	60	NTPR416F	H40	155.02
20	100	NTPR420F	H40	182.84
24	100	NTPR424F	H40	198.74
28	100	NTPR428F	H46¼	204.04
32	200	NTPR432F	H51	251.74
36	200	NTPR436F	H57	292.82
40	200	NTPR440F	H57	310.04

Discount Schedule E

FEDERAL NOARK PANELBOARDS

Tumbler Switch Panelboards

MOULDED BAKELITE SECTIONS

TYPES NTIP-3—NTIC-3

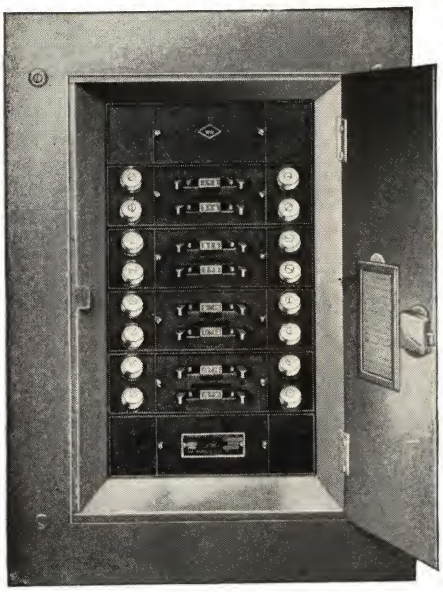
Mains: 3 Wire, 125/250 Volts, SN, A.C. or D.C.

Branches: 30 Ampere S.P. Heavy Duty Tumbler Switches, 2 Wire, 125 Volts, SN.

Box: Code Gauge Galvanized steel. 19″ Wide, 4¾″ Deep. Gutters 4″ Side, 4½″ Top and Bottom.

Hardware: Heavy Duty Flush Steel Hinges. Flush Cylinder Combination Lock and Catch.

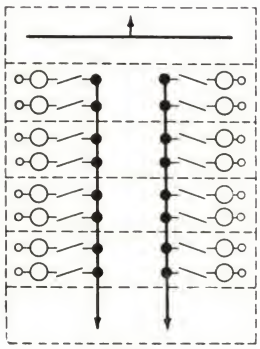
Finish: Box Natural—Front Light Gray.



Flush or Surface Mounting

ONE FUSE BRANCHES

Plug or Cartridge Type



3 Wire
Solid Neutral

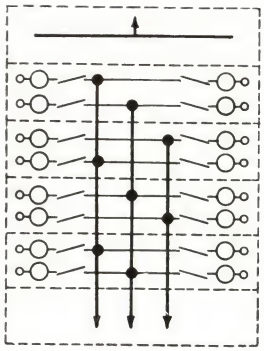
No. of Cir.	Main Amps.	SINGLE DOOR Cat. No. Plug Fuses	SINGLE DOOR Cat. No. Cartridge Fuses	List Price	Box Height	Box No.	DOOR-IN-DOOR Cat. No. Plug Fuses	DOOR-IN-DOOR Cat. No. Cartridge Fuses	List Price	Box Height	Box No.
				MAINS WITH LUGS ONLY							
4	30	NTIP04-3L	NTIC04-3L	$ 78.00	15″	B1915	NTIP04-3LD	NTIC04-3LD	$108.00	18″	B1918
8	60	NTIP08-3L	NTIC08-3L	94.00	18″	B1918	NTIP08-3LD	NTIC08-3LD	124.00	21″	B1921
12	60	NTIP12-3L	NTIC12-3L	110.00	21″	B1921	NTIP12-3LD	NTIC12-3LD	140.00	24″	B1924
16	100	NTIP16-3L	NTIC16-3L	126.00	27″	B1927	NTIP16-3LD	NTIC16-3LD	156.00	27″	B1927
20	100	NTIP20-3L	NTIC20-3L	142.00	30″	B1930	NTIP20-3LD	NTIC20-3LD	172.00	30″	B1930
24	200	NTIP24-3L	NTIC24-3L	158.00	33″	B1933	NTIP24-3LD	NTIC24-3LD	188.00	33″	B1933
28	200	NTIP28-3L	NTIC28-3L	174.00	39″	B1939	NTIP28-3LD	NTIC28-3LD	204.00	39″	B1939
32	200	NTIP32-3L	NTIC32-3L	190.00	42″	B1942	NTIP32-3LD	NTIC32-3LD	220.00	42″	B1942
36	200	NTIP36-3L	NTIC36-3L	206.00	45″	B1945	NTIP36-3LD	NTIC36-3LD	236.00	45″	B1945
40	200	NTIP40-3L	NTIC40-3L	222.00	48″	B1948	NTIP40-3LD	NTIC40-3LD	252.00	48″	B1948
				FUSIBLE MAIN DISCONNECT							
4	30	NTIP04-3F	NTIC04-3F	$100.00	18″	B1918	NTIP04-3FD	NTIC04-3FD	$130.00	18″	B1918
8	60	NTIP08-3F	NTIC08-3F	116.00	21″	B1921	NTIP08-3FD	NTIC08-3FD	146.00	21″	B1921
12	60	NTIP12-3F	NTIC12-3F	142.00	24″	B1924	NTIP12-3FD	NTIC12-3FD	172.00	24″	B1924
16	100	NTIP16-3F	NTIC16-3F	158.00	33″	B1933	NTIP16-3FD	NTIC16-3FD	188.00	33″	B1933
20	100	NTIP20-3F	NTIC20-3F	174.00	36″	B1936	NTIP20-3FD	NTIC20-3FD	204.00	36″	B1936
24	200	NTIP24-3F	NTIC24-3F	250.00	48″	B1948	NTIP24-3FD	NTIC24-3FD	280.00	48″	B1948
28	200	NTIP28-3F	NTIC28-3F	266.00	54″	B1954	NTIP28-3FD	NTIC28-3FD	296.00	54″	B1954
32	200	NTIP32-3F	NTIC32-3F	282.00	57″	B1957	NTIP32-3FD	NTIC32-3FD	312.00	57″	B1957
36	200	NTIP36-3F	NTIC36-3F	298.00	60″	B1960	NTIP36-3FD	NTIC36-3FD	328.00	60″	B1960
40	200	NTIP40-3F	NTIC40-3F	314.00	63″	B1963	NTIP40-3FD	NTIC40-3FD	344.00	63″	B1963

Extras for Panels other than Standard — prices on request.

FEDERAL NOARK PANELBOARDS

Tumbler Switch Panelboards

MOULDED BAKELITE SECTIONS
TYPES NTIP-4 • NTIC-4



4 Wire Solid Neutral

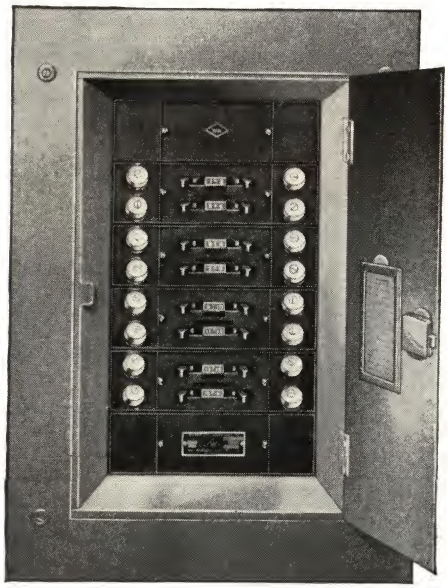
MAINS: 120/208 Volt, 3 Phase, 4 Wire S/N.

BRANCHES: 120 Volt, 2 Wire S/N with 30 Ampere S.P. Heavy Duty Tumbler Switches.

BOX: Code Gauge Galvanized Steel. * 19″ Wide, 4¾″ Deep. Gutters 4″ Sides, 4½″ Top and Bottom. Standard Knockouts. For Special Knockouts, Send Template Form with Order.

HARDWARE: Heavy Duty Flush Steel Hinges. Flush Cylinder Type Combination Lock and Catch.

FINISH: Natural—Front Light Gray.



Flush or Surface Mounting

ONE FUSE BRANCHES

Plug or Cartridge Type

No. of Clr.	Mains Amps.	SINGLE DOOR Catalog No. Plug Fuses	Cartridge Fuses	Appr. List Price	Box Ship. Wt.	Box Ht. In.	Box Cat. No.	DOOR-IN-DOOR Catalog No. Plug Fuses	Cartridge Fuses	Appr. List Price	Box Ship. Wt.	Box Ht. In.	Box Cat. No.
MAINS WITH LUGS ONLY													
8	60	NTIP08-4L	NTIC08-4L	$104.00	50	21	B1921	NTIP08-4LD	NTIC08-4LD	$134.00	50	21	B1921
12	60	NTIP12-4L	NTIC12-4L	120.00	57	24	B1924	NTIP12-4LD	NTIC12-4LD	150.00	57	24	B1924
16	60	NTIP16-4L	NTIC16-4L	136.00	64	27	B1927	NTIP16-4LD	NTIC16-4LD	166.00	64	27	B1927
20	100	NTIP20-4L	NTIC20-4L	152.00	72	30	B1930	NTIP20-4LD	NTIC20-4LD	182.00	72	30	B1930
24	100	NTIP24-4L	NTIC24-4L	168.00	79	33	B1933	NTIP24-4LD	NTIC24-4LD	198.00	79	33	B1933
28	100	NTIP28-4L	NTIC28-4L	184.00	91	39	B1939	NTIP28-4LD	NTIC28-4LD	214.00	91	39	B1939
32	200	NTIP32-4L	NTIC32-4L	200.00	100	42	B1942	NTIP32-4LD	NTIC32-4LD	230.00	110	42	B1942
36	200	NTIP36-4L	NTIC36-4L	216.00	122	45	B1945	NTIP36-4LD	NTIC36-4LD	246.00	122	45	B1945
40	200	NTIP40-4L	NTIC40-4L	232.00	134	48	B1948	NTIP40-4LD	NTIC40-4LD	262.00	134	48	B1948
FUSIBLE MAIN DISCONNECT													
8	60	NTIP08-4F	NTIC08-4F	$126.00	58	24	B1924	NTIP08-4FD	NTIC08-4FD	$156.00	58	24	B1924
12	60	NTIP12-4F	NTIC12-4F	142.00	65	27	B1927	NTIP12-4FD	NTIC12-4FD	172.00	65	27	B1927
16	60	NTIP16-4F	NTIC16-4F	158.00	73	30	B1930	NTIP16-4FD	NTIC16-4FD	188.00	73	30	B1930
20	100	NTIP20-4F	NTIC20-4F	202.00	93	36	B1936	NTIP20-4FD	NTIC20-4FD	232.00	93	36	B1936
24	100	NTIP24-4F	NTIC24-4F	218.00	100	39	B1939	NTIP24-4FD	NTIC24-4FD	248.00	100	39	B1939
28	100	NTIP28-4F	NTIC28-4F	234.00	107	45	B1945	NTIP28-4FD	NTIC28-4FD	264.00	107	45	B1945
32	200	NTIP32-4F	NTIC32-4F	329.00	159	*58		NTIP32-4FD	NTIC32-4FD	359.00	159	*58	
36	200	NTIP36-4F	NTIC36-4F	345.00	170	*61		NTIP36-4FD	NTIC36-4FD	375.00	170	*61	
40	200	NTIP40-4F	NTIC40-4F	361.00	181	*64		NTIP40-4FD	NTIC40-4FD	391.00	181	*64	

*BOXES MARKED WITH (*) ARE 24″ WIDE.
Extras for Panels Other Than Standard, information on request.

FEDERAL NOARK PANELBOARDS

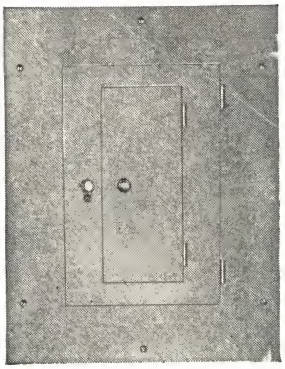
Tumbler Switch Panelboards

MOULDED BAKELITE SECTIONS

TYPE T2P-2
FOR PLUG FUSES
Mains: 2 Wire, 125 Volts.
Branches: 2 Wire, 125 Volts.

TYPE T2C-2
FOR CARTRIDGE FUSES
Mains: 2 Wire, 125 or 250 Volts.
Branches: 2 Wire, 125 or 250 Volts.

30 Ampere Double Pole Tumbler Switch and Double Pole Fusing



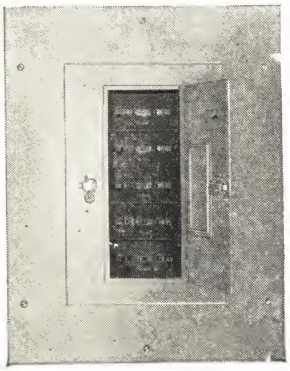
Cat. No. T2P10-2LD
Door-In-Door

Box: Code Gauge Galvanized Steel, 19″ Wide, 4¾″ Deep. Gutters, 4″ Side, 4½″ Top and Bottom.

Hardware: Heavy Duty Flush Steel Hinges. Flush Type Combination Lock and Catch.

Finish: Box Natural—Front Pearl Gray.

Flush or Surface Mounting
TWO FUSE BRANCHES
Plug or Cartridge Type



Cat. No. T2P10-2LD
Door-In-Door

No. of Circuits	Main Amps.	SINGLE DOOR Cat. No. Plug Fuses	Cartridge Fuses	List Price	Box Height	Box No.	DOOR-IN-DOOR Cat. No. Plug Fuses	Cartridge Fuses	List Price	Box Height	Box No.
MAINS WITH LUGS ONLY											
4	60	T2P04-2L	T2C04-2L	$ 96.00	18″	B 1918	T2P04-2LD	T2C04-2LD	$126.00	21″	B 1921
6	100	T2P06-2L	T2C06-2L	116.00	21″	B 1921	T2P06-2LD	T2C06-2LD	146.00	24″	B 1924
8	100	T2P08-2L	T2C08-2L	134.00	24″	B 1924	T2P08-2LD	T2C08-2LD	164.00	27″	B 1927
10	100	T2P10-2L	T2C10-2L	152.00	27″	B 1927	T2P10-2LD	T2C10-2LD	182.00	30″	B 1930
12	200	T2P12-2L	T2C12-2L	170.00	30″	B 1930	T2P12-2LD	T2C12-2LD	200.00	33″	B 1933
14	200	T2P14-2L	T2C14-2L	188.00	33″	B 1933	T2P14-2LD	T2C14-2LD	218.00	36″	B 1936
16	200	T2P16-2L	T2C16-2L	206.00	36″	B 1936	T2P16-2LD	T2C16-2LD	236.00	39″	B 1939
18	200	T2P18-2L	T2C18-2L	224.00	39″	B 1939	T2P18-2LD	T2C18-2LD	254.00	42″	B 1942
20	200	T2P20-2L	T2C20-2L	242.00	42″	B 1942	T2P20-2LD	T2C20-2LD	272.00	45″	B 1945
FUSIBLE MAIN DISCONNECT											
4	60	T2P04-2F	T2C04-2F	$118.00	18″	B 1918	T2P04-2FD	T2C04-2FD	$148.00	21″	B 1921
6	100	T2P06-2F	T2C06-2F	148.00	27″	B 1927	T2P06-2FD	T2C06-2FD	178.00	30″	B 1930
8	100	T2P08-2F	T2C08-2F	166.00	30″	B 1930	T2P08-2FD	T2C08-2FD	196.00	33″	B 1933
10	100	T2P10-2F	T2C10-2F	184.00	33″	B 1933	T2P10-2FD	T2C10-2FD	214.00	36″	B 1936
12	200	T2P12-2F	T2C12-2F	262.00	45″	B 1945	T2P12-2FD	T2C12-2FD	292.00	48″	B 1948
14	200	T2P14-2F	T2C14-2F	280.00	48″	B 1948	T2P14-2FD	T2C14-2FD	310.00	51″	B 1951
16	200	T2P16-2F	T2C16-2F	298.00	51″	B 1951	T2P16-2FD	T2C16-2FD	328.00	54″	B 1954
18	200	T2P18-2F	T2C18-2F	316.00	54″	B 1954	T2P18-2FD	T2C18-2FD	346.00	57″	B 1957
20	200	T2P20-2F	T2C20-2F	334.00	57″	B 1957	T2P20-2FD	T2C20-2FD	364.00	60″	B 1960

Extras for panels other than standard, prices on request.

FEDERAL NOARK PANELBOARDS

Tumbler Switch Panelboards

MOULDED BAKELITE SECTIONS

Type T2P-3
For Plug Fuses

Mains: 3 Wire, 125/250 Volts
Branches: 2 Wire, 125 Volts

Type T2C-3
For Cartridge Fuses

Mains: 3 Wire, 125-250 or 250 Volts
Branches: 2 Wire, 125 or 250 Volts

30 Ampere Double Pole Tumbler Switch and Double Pole Fusing



Cat. No. T2P10-3L

Box: Code Gauge Galvanized Steel, 19″ Wide, 4¾″ Deep. Gutters 4″ Side, 4½″ Top and Bottom.

Hardware: Heavy Duty Flush Steel Hinges. Flush Type Combination Lock and Catch.

Finish: Box Natural — Front Pearl Gray.

Flush or Surface Mounting

TWO FUSE BRANCHES

Plug or Cartridge Type



Cat. No. T2P10-3LD

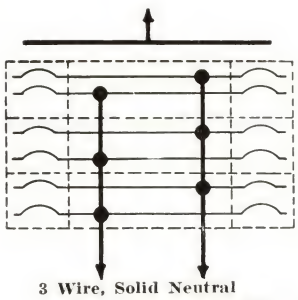
No. of Cir.	Main Amps.	SINGLE DOOR Cat. No. Plug Fuses	Cartridge Fuses	List Price	Box Height	Box No	DOOR-IN-DOOR Cat. No. Plug Fuses	Cartridge Fuses	List Price	Box Height	Box No.
MAINS WITH LUGS ONLY											
4	30	T2P04-3L	T2C04-3L	$ 96.00	18″	B1918	T2P04-3LD	T2C04-3LD	$126.00	21″	B1921
6	60	T2P06-3L	T2C06-3L	116.00	21″	B1921	T2P06-3LD	T2C06-3LD	146.00	24″	B1924
8	60	T2P08-3L	T2C08-3L	134.00	24″	B1924	T2P08-3LD	T2C08-3LD	164.00	27″	B1927
10	60	T2P10-3L	T2C10-3L	152.00	27″	B1927	T2P10-3LD	T2C10-3LD	182.00	30″	B1930
12	60	T2P12-3L	T2C12-3L	170.00	30″	B1930	T2P12-3LD	T2C12-3LD	200.00	33″	B1933
14	100	T2P14-3L	T2C14-3L	188.00	33″	B1933	T2P14-3LD	T2C14-3LD	218.00	36″	B1936
16	100	T2P16-3L	T2C16-3L	206.00	36″	B1936	T2P16-3LD	T2C16-3LD	236.00	39″	B1939
18	100	T2P18-3L	T2C18-3L	224.00	39″	B1939	T2P18-3LD	T2C18-3LD	254.00	42″	B1942
20	100	T2P20-3L	T2C20-3L	242.00	42″	B1942	T2P20-3LD	T2C20-3LD	272.00	45″	B1945
FUSIBLE MAIN DISCONNECT											
4	30	T2P04-3F	T2C04-3F	$134.88	18″	B1918	T2P04-3FD	T2C04-3FD	$163.68	21″	B1921
6	60	T2P06-3F	T2C06-3F	154.52	24″	B1924	T2P06-3FD	T2C06-3FD	183.32	27″	B1927
8	60	T2P08-3F	T2C08-3F	172.84	27″	B1927	T2P08-3FD	T2C08-3FD	201.66	30″	B1930
10	60	T2P10-3F	T2C10-3F	191.18	30″	B1930	T2P10-3FD	T2C10-3FD	219.98	33″	B1933
12	60	T2P12-3F	T2C12-3F	210.82	33″	B1933	T2P12-3FD	T2C12-3FD	239.64	36″	B1936
14	100	T2P14-3F	T2C14-3F	248.80	39″	B1939	T2P14-3FD	T2C14-3FD	278.92	42″	B1942
16	100	T2P16-3F	T2C16-3F	268.44	42″	B1942	T2P16-3FD	T2C16-3FD	298.56	45″	B1945
18	100	T2P18-3F	T2C18-3F	286.78	45″	B1945	T2P18-3FD	T2C18-3FD	316.90	48″	B1948
20	100	T2P20-3F	T2C20-3F	305.10	48″	B1948	T2P20-3FD	T2C20-3FD	335.22	51″	B1951

Extras for Panels other than Standard, prices on request.

FEDERAL NOARK PANELBOARDS

Type NMM

MULTI-BREAKER LIGHTING PANELBOARD
120/240 VOLTS A.C. ONLY



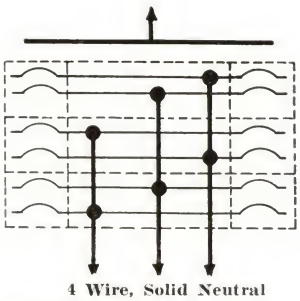
3 Wire, Solid Neutral

TYPE NMM-3

MAINS: 120/240 Volt, 3 Wire S/N A.C. only.

TYPE NMM-4

MAINS: 120/208 Volt, 3 Phase, 4 Wire S/N.



4 Wire, Solid Neutral

BRANCHES: 120 Volt, 2 Wire S/N with 15 Ampere Single Pole Breakers, type M.
BOX: Code Gauge Galvanized Steel. See table below for box height.
With Main Lugs—19″ wide, 4¾″ deep. Gutters 4″ sides, 4½″ top and bottom.
With Main Breaker—20″ wide, 5¾″ deep. Gutters 4½″ sides, top and bottom.
FINISH: Box Natural, Front Light Gray. Flush or Surface Mounting.

Branch Poles	Amp. Cap. of Mains	Catalog Number	List Price Complete	Box Wt. Each	Box Ht. In.	Box Cat. No.
MAINS: LUGS ONLY						
4	50	NMM04-3L	$92.96	47	18	B 1918
6	50	NMM06-3L	106.06	48	18	B 1918
8	50	NMM08-3L	119.16	49	18	B 1918
10	50	NMM10-3L	132.26	55	21	B 1921
12	100	NMM12-3L	145.34	56	21	B 1921
14	100	NMM14-3L	158.44	62	24	B 1924
16	100	NMM16-3L	171.54	63	24	B 1924
18	100	NMM18-3L	184.64	64	24	B 1924
20	100	NMM20-3L	197.72	65	24	B 1924
22	200	NMM22-3L	210.82	72	27	B 1927
24	200	NMM24-3L	223.92	73	27	B 1927
26	200	NMM26-3L	237.02	81	30	B 1930
28	200	NMM28-3L	250.10	82	30	B 1930
30	200	NMM30-3L	263.20	89	33	B 1933
32	200	NMM32-3L	276.30	90	33	B 1933
34	200	NMM34-3L	289.40	97	36	B 1936
36	200	NMM36-3L	302.48	98	36	B 1936
38	200	NMM38-3L	315.58	99	36	B 1936
40	200	NMM40-3L	328.68	100	36	B 1936
42	225	NMM42-3L	341.78	106	39	B 1939
MAINS: CIRCUIT BREAKER—2 POLE						
4	50	NMM04-3AB	$106.33	56	21	B 2021
6	50	NMM06-3AB	118.24	57	24	B 2024
8	50	NMM08-3AB	121.86	58	24	B 2024
10	50	NMM10-3AB	125.48	62	27	B 2027
12	100	NMM12-3AB	158.10	73	30	B 2030
14	100	NMM14-3AB	161.72	79	33	B 2033
16	100	NMM16-3AB	165.34	80	33	B 2033
18	100	NMM18-3AB	168.96	86	36	B 2036
20	100	NMM20-3AB	172.58	87	36	B 2036
22	200	NMM22-3AB	350.20	134	42	B 2042
24	200	NMM24-3AB	353.82	135	48	B 2048
26	200	NMM26-3AB	357.44	147	48	B 2048
28	200	NMM28-3AB	361.06	148	45	B 2045
30	200	NMM30-3AB	364.68	149	48	B 2048
32	200	NMM32-3AB	398.30	150	48	B 2048
34	200	NMM34-3AB	401.92	158	51	B 2051
36	200	NMM36-3AB	405.54	160	51	B 2051
38	200	NMM38-3AB	409.16	167	54	B 2054
40	200	NMM40-3AB	412.78	168	54	B 2054
42	225	NMM42-3AB	416.40	169	54	B 2054

Branch Poles	Amp. Cap. of Mains	Catalog Number	List Price Complete	Box Wt. Each	Box Ht. In.	Box Cat. No.
MAINS: LUGS ONLY						
6	50	NMM06-4L	$115.22	50	18	B 1918
8	50	NMM08-4L	128.32	51	18	B 1918
10	50	NMM10-4L	141.42	57	21	B 1921
12	50	NMM12-4L	154.52	58	21	B 1921
14	50	NMM14-4L	167.60	64	24	B 1924
16	100	NMM16-4L	180.70	65	24	B 1924
18	100	NMM18-4L	193.80	66	24	B 1924
20	100	NMM20-4L	206.90	67	24	B 1924
22	100	NMM22-4L	219.98	74	27	B 1927
24	100	NMM24-4L	233.08	75	27	B 1927
26	100	NMM26-4L	246.18	83	30	B 1930
28	100	NMM28-4L	259.28	84	30	B 1930
30	100	NMM30-4L	272.38	91	33	B 1933
32	200	NMM32-4L	285.46	92	33	B 1933
34	200	NMM34-4L	298.56	99	36	B 1936
36	200	NMM36-4L	311.66	100	36	B 1936
38	200	NMM38-4L	324.76	101	36	B 1936
40	200	NMM40-4L	337.84	102	36	B 1936
42	200	NMM42-4L	350.94	108	39	B 1939
MAINS: CIRCUIT BREAKER—3 POLE						
6	50	NMM06-4AB	$124.66	59	24	B 2024
8	50	NMM08-4AB	130.86	60	24	B 2024
10	50	NMM10-4AB	134.48	64	27	B 2027
12	50	NMM12-4AB	138.10	65	27	B 2027
14	50	NMM14-4AB	185.78	69	30	B 2030
16	100	NMM16-4AB	195.34	82	33	B 2033
18	100	NMM18-4AB	198.96	89	36	B 2036
20	100	NMM20-4AB	224.58	90	36	B 2036
22	100	NMM22-4AB	228.20	91	36	B 2036
24	100	NMM24-4AB	231.82	92	36	B 2036
26	100	NMM26-4AB	235.44	106	42	B 2042
28	100	NMM28-4AB	239.06	107	42	B 2042
30	100	NMM30-4AB	242.68	108	42	B 2042
32	200	NMM32-4AB	450.30	152	48	B 2048
34	200	NMM34-4AB	453.92	160	51	B 2051
36	200	NMM36-4AB	457.54	161	51	B 2051
38	200	NMM38-4AB	461.16	167	54	B 2054
40	200	NMM40-4AB	464.78	168	54	B 2054
42	200	NMM42-4AB	468.40	169	54	B 2054

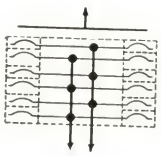
EXTRAS: For panels other than standard.
RATINGS: 15 ampere single pole breakers in branch circuits standard. Ratings of 20, 25, 35 and 50 amperes can be furnished at no increase in price. Use of branch breakers greater than 15 amperes may require an addition for increased main bus capacity.
TWO POLE: Two pole circuits (independent trip) can be furnished by use of handle tie between two single pole breakers of opposite polarity. To figure panel with two pole branches, convert to total number of single poles and add **$1.50** list for each double pole substituted for two single poles.
SPACE ONLY: For space only for future branch circuits figure panel as having total number of branches including spaces and deduct **$2.00** list for each pole omitted.

FEDERAL NOARK PANELBOARDS

Type NLAB

CIRCUIT BREAKER LIGHTING PANELBOARDS

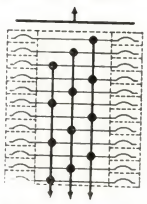
With Quicklag Breakers 120/240 Volts A.C. Only



NLAB-3

MAINS: 120/240 Volts, 3 Wire, Solid Neutral A.C. Only.

BRANCHES: 120 Volts, 2 Wire S/N with 15 Ampere, One Pole Quicklag Circuit Breakers.



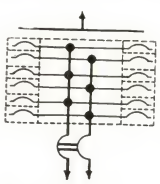
NLAB-4

MAINS: 120/208 Volts, 3 Phase, 4 Wire, Solid Neutral A.C. Only.

BRANCHES: 120 Volts, 2 Wire S/N with 15 Ampere, One Pole Quicklag Circuit Breakers.

BOX: Code Gauge Galvanized Steel, 19″ Wide, 4¾″ Deep for Lug in Main. 20″ Wide, 5¾″ Deep for Main Breaker type.
FINISH: Box Natural, Front Light Gray.

Branch Poles	Amp. Cap. of Mains	Catalog Number	List Price Complete	Box Wt. Each	Box Ht. In.	Box Cat. No.
		MAINS: LUGS ONLY				
4	50	NLAB04-3L	$87.00	39	18	B 1918
6	50	NLAB06-3L	99.00	40	18	B 1918
8	50	NLAB08-3L	111.00	41	18	B 1918
10	50	NLAB10-3L	123.00	47	21	B 1921
12	100	NLAB12-3L	135.00	53	21	B 1921
14	100	NLAB14-3L	147.00	59	24	B 1924
16	100	NLAB16-3L	159.00	60	24	B 1924
18	100	NLAB18-3L	171.00	61	24	B 1924
20	100	NLAB20-3L	183.00	62	24	B 1924
22	200	NLAB22-3L	195.00	70	27	B 1927
24	200	NLAB24-3L	207.00	71	27	B 1927
26	200	NLAB26-3L	219.00	77	30	B 1930
28	200	NLAB28-3L	231.00	78	30	B 1930
30	200	NLAB30-3L	243.00	84	33	B 1933
32	200	NLAB32-3L	255.00	85	33	B 1933
34	200	NLAB34-3L	267.00	91	36	B 1936
36	200	NLAB36-3L	279.00	92	36	B 1936
38	200	NLAB38-3L	291.00	93	36	B 1936
40	200	NLAB40-3L	303.00	94	36	B 1936
42	210	NLAB42-3L	315.00	100	39	B 1939



MAINS: CIRCUIT BREAKER

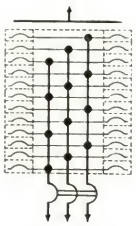
2 POLE

4	50	NLAB04-3AB	$114.00	48	24	B 2024
6	50	NLAB06-3AB	126.00	49	24	B 2024
8	50	NLAB08-3AB	138.00	50	24	B 2024
10	50	NLAB10-3AB	150.00	56	27	B 2027
12	100	NLAB12-3AB	196.00	65	30	B 2030
14	100	NLAB14-3AB	208.00	71	33	B 2033
16	100	NLAB16-3AB	220.00	72	33	B 2033
18	100	NLAB18-3AB	232.00	78	36	B 2036
20	100	NLAB20-3AB	244.00	79	36	B 2036
22	200	NLAB22-3AB	388.00	104	42	B 2042
24	200	NLAB24-3AB	400.00	105	42	B 2042
26	200	NLAB26-3AB	412.00	117	48	B 2048
28	200	NLAB28-3AB	424.00	118	48	B 2048
30	200	NLAB30-3AB	436.00	119	48	B 2048
32	200	NLAB32-3AB	448.00	120	48	B 2048
34	200	NLAB34-3AB	460.00	126	51	B 2051
36	200	NLAB36-3AB	472.00	127	51	B 2051
38	200	NLAB38-3AB	484.00	133	54	B 2054
40	200	NLAB40-3AB	496.00	134	54	B 2054
42	210	NLAB42-3AB	508.00	135	54	B 2054

EXTRAS: For panels other than standard.

RATINGS: 15 ampere single pole breakers in branch circuits standard. Ratings of 20, 30, 40, and 50 amperes can be furnished at no increase in price. Use of branch breakrs greater than 15 amperes may require an addition for increased main bus capacity.

Branch Poles	Amp. Cap. of Mains	Catalog Number	List Price Complete	Box Wt. Each	Box Ht. In.	Box Cat. No.
		MAINS: LUGS ONLY				
6	50	NLAB06-4L	$109.00	42	18	B 1918
8	50	NLAB08-4L	121.00	43	18	B 1918
10	50	NLAB10-4L	133.00	49	21	B 1921
12	50	NLAB12-4L	145.00	50	21	B 1921
14	50	NLAB14-4L	157.00	56	24	B 1924
16	100	NLAB16-4L	169.00	62	24	B 1924
18	100	NLAB18-4L	181.00	63	24	B 1924
20	100	NLAB20-4L	193.00	64	24	B 1924
22	100	NLAB22-4L	205.00	70	27	B 1927
24	100	NLAB24-4L	217.00	71	27	B 1927
26	100	NLAB26-4L	229.00	77	30	B 1930
28	100	NLAB28-4L	241.00	78	30	B 1930
30	100	NLAB30-4L	253.00	84	33	B 1933
32	200	NLAB32-4L	265.00	90	33	B 1933
34	200	NLAB34-4L	277.00	96	36	B 1936
36	200	NLAB36-4L	289.00	97	36	B 1936
38	200	NLAB38-4L	301.00	98	36	B 1936
40	200	NLAB40-4L	313.00	99	36	B 1936
42	200	NLAB42-4L	325.00	105	39	B 1939



MAINS: CIRCUIT BREAKER

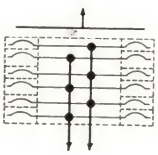
3 POLE

6	50	NLAB06-4AB	$147.00	50	24	B 2024
8	50	NLAB08-4AB	159.00	51	24	B 2024
10	50	NLAB10-4AB	171.00	57	27	B 2027
12	50	NLAB12-4AB	183.00	58	27	B 2027
14	50	NLAB14-4AB	195.00	64	30	B 2030
16	100	NLAB16-4AB	246.00	75	33	B 2033
18	100	NLAB18-4AB	258.00	81	36	B 2036
20	100	NLAB20-4AB	270.00	82	36	B 2036
22	100	NLAB22-4AB	282.00	83	36	B 2036
24	100	NLAB24-4AB	294.00	84	36	B 2036
26	100	NLAB26-4AB	306.00	96	42	B 2042
28	100	NLAB28-4AB	318.00	97	42	B 2042
30	100	NLAB30-4AB	330.00	98	42	B 2042
32	200	NLAB32-4AB	503.00	124	48	B 2048
34	200	NLAB34-4AB	515.00	130	51	B 2051
36	200	NLAB36-4AB	527.00	131	51	B 2051
38	200	NLAB38-4AB	539.00	137	54	B 2054
40	200	NLAB40-4AB	551.00	138	54	B 2054
42	200	NLAB42-4AB	563.00	139	54	B 2054

TWO POLE: Add $2.00 List to price of 2 single pole breakers for each double pole (independent trip) branch.

SPACE ONLY: For space only for future branch circuits figure panel as having total number of branches including spaces and deduct $4.50 list for each pole omitted.

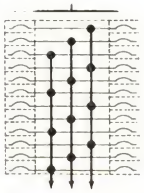
FEDERAL NOARK PANELBOARDS
Type NA1B
CIRCUIT BREAKER LIGHTING PANELBOARDS FOR A.C. OR D.C.



NA1B-3

MAINS: 125/250 Volts, 3 Wire S/N A.C. or D.C.

BRANCHES: 125 Volts, 2 Wire S/N with 15 Ampere, One Pole Circuit Breakers.



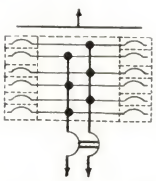
NA1B-4

MAINS: 120/208 Volts, 3 Phase 4 Wire S/N A.C.

BRANCHES: 125 Volts, 2 Wire S/N with 15 Ampere, One Pole Circuit Breakers.

BOX: Code Gauge Galvanized Steel, 20″ Wide, 5¾″ Deep. Gutters 4″ Sides, 4½″ top and bottom.
FINISH: Box Natural, Front Light Gray.
Flush or Surface Mounting.

Branch Poles	Amp. Cap. of Mains	Catalog Number	List Price Complete	Box Wt. Each	Box Ht. In.	Box Cat. No.
		MAINS: LUGS ONLY				
4	50	**NA1B04-3L**	**$100.00**	47	15	B 2015
6	50	**NA1B06-3L**	**122.00**	53	18	B 2018
8	50	**NA1B08-3L**	**144.00**	55	18	B 2018
10	50	**NA1B10-3L**	**166.00**	61	21	B 2021
12	100	**NA1B12-3L**	**188.00**	66	21	B 2021
14	100	**NA1B14-3L**	**210.00**	72	24	B 2024
16	100	**NA1B16-3L**	**232.00**	78	27	B 2027
18	100	**NA1B18-3L**	**254.00**	80	27	B 2027
20	100	**NA1B20-3L**	**276.00**	86	30	B 2030
22	200	**NA1B22-3L**	**298.00**	93	30	B 2030
24	200	**NA1B24-3L**	**320.00**	99	33	B 2033
26	200	**NA1B26-3L**	**342.00**	105	36	B 2036
28	200	**NA1B28-3L**	**364.00**	107	36	B 2036
30	200	**NA1B30-3L**	**386.00**	113	39	B 2039
32	200	**NA1B32-3L**	**408.10**	115	39	B 2039
34	200	**NA1B34-3L**	**430.00**	121	42	B 2042
36	200	**NA1B36-3L**	**452.00**	123	42	B 2042
38	200	**NA1B38-3L**	**474.00**	129	45	B 2045
40	200	**NA1B40-3L**	**496.00**	131	45	B 2045
42	225	**NA1B42-3L**	**518.00**	137	48	B 2048



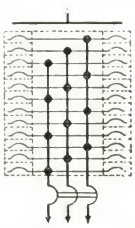
MAINS: CIRCUIT BREAKER
2 POLE

4	50	**NA1B04-3AB**	**$118.00**	54	18	B 2018
6	50	**NA1B06-3AB**	**140.00**	56	18	B 2018
8	50	**NA1B08-3AB**	**162.00**	58	18	B 2018
10	50	**NA1B10-3AB**	**184.00**	64	21	B 2021
12	100	**NA1B12-3AB**	**236.00**	89	33	B 2033
14	100	**NA1B14-3AB**	**258.00**	91	33	B 2033
16	100	**NA1B16-3AB**	**280.00**	97	36	B 2036
18	100	**NA1B18-3AB**	**302.00**	99	36	B 2036
20	100	**NA1B20-3AB**	**324.00**	105	39	B 2039
22	200	**NA1B22-3AB**	**470.00**	130	45	B 2045
24	200	**NA1B24-3AB**	**492.00**	132	45	B 2045
26	200	**NA1B26-3AB**	**514.00**	144	51	B 2051
28	200	**NA1B28-3AB**	**536.00**	150	54	B 2054
30	200	**NA1B30-3AB**	**558.00**	152	54	B 2054
32	200	**NA1B32-3AB**	**580.00**	158	57	B 2057
34	200	**NA1B34-3AB**	**602.00**	160	57	B 2057
36	200	**NA1B36-3AB**	**624.00**	166	60	B 2060
38	200	**NA1B38-3AB**	**646.00**	168	60	B 2060
40	200	**NA1B40-3AB**	**668.00**	174	63	B 2063
42	225	**NA1B42-3AB**	**690.00**	176	63	B 2063

EXTRAS: For panels other than standard.

RATINGS: 15 Ampere single pole breakers in branch circuits standard. Ratings of 20, 30, 40, and 50 amperes can be furnished at no increase in price. Use of branch breakers greater than 15 amperes may require an addition for increased main bus capacity.

Branch Poles	Amp. Cap. of Mains	Catalog Number	List Price Complete	Box Wt. Each	Box Ht. In.	Box Cat. No.
		MAINS: LUGS ONLY				
6	50	**NA1B06-4L**	**$130.00**	58	21	B 2021
8	50	**NA1B08-4L**	**152.00**	60	21	B 2021
10	50	**NA1B10-4L**	**174.00**	66	24	B 2024
12	50	**NA1B12-4L**	**196.00**	68	24	B 2024
14	50	**NA1B14-4L**	**218.00**	70	24	B 2024
16	100	**NA1B16-4L**	**240.00**	80	27	B 2027
18	100	**NA1B18-4L**	**262.00**	82	27	B 2027
20	100	**NA1B20-4L**	**284.00**	88	30	B 2030
22	100	**NA1B22-4L**	**306.00**	90	30	B 2030
24	100	**NA1B24-4L**	**328.00**	96	33	B 2033
26	100	**NA1B26-4L**	**350.00**	102	36	B 2036
28	100	**NA1B28-4L**	**372.00**	104	36	B 2036
30	100	**NA1B30-4L**	**394.00**	110	39	B 2039
32	200	**NA1B32-4L**	**416.00**	118	39	B 2039
34	200	**NA1B34-4L**	**438.00**	124	42	B 2042
36	200	**NA1B36-4L**	**460.00**	126	42	B 2042
38	200	**NA1B38-4L**	**482.00**	132	45	B 2045
40	200	**NA1B40-4L**	**504.00**	134	45	B 2045
42	200	**NA1B42-4L**	**526.00**	140	48	B 2048



MAINS: CIRCUIT BREAKER
3 POLE

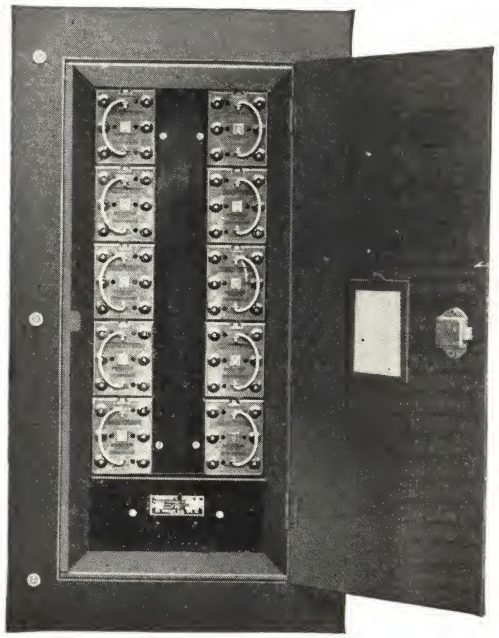
6	50	**NA1B06-4AB**	**$157.00**	58	18	B 2018
8	50	**NA1B08-4AB**	**179.00**	64	21	B 2021
10	50	**NA1B10-4AB**	**201.00**	66	21	B 2021
12	50	**NA1B12-4AB**	**223.00**	72	24	B 2024
14	50	**NA1B14-4AB**	**245.00**	74	24	B 2024
16	100	**NA1B16-4AB**	**302.00**	102	36	B 2036
18	100	**NA1B18-4AB**	**324.00**	104	36	B 2036
20	100	**NA1B20-4AB**	**346.00**	110	39	B 2039
22	100	**NA1B22-4AB**	**368.00**	112	39	B 2039
24	100	**NA1B24-4AB**	**390.00**	118	42	B 2042
26	100	**NA1B26-4AB**	**412.00**	130	48	B 2048
28	100	**NA1B28-4AB**	**434.00**	132	48	B 2048
30	100	**NA1B30-4AB**	**456.00**	138	51	B 2051
32	200	**NA1B32-4AB**	**628.00**	170	57	B 2057
34	200	**NA1B34-4AB**	**650.00**	172	57	B 2057
36	200	**NA1B36-4AB**	**672.00**	178	60	B 2060
38	200	**NA1B38-4AB**	**694.00**	180	60	B 2060
40	200	**NA1B40-4AB**	**716.00**	186	63	B 2063
42	200	**NA1B42-4AB**	**738.00**	188	63	B 2063

TWO AND THREE POLE: When panelboard has all 2 pole, all 3 pole, or 1 and 2 pole, or 1, 2, and 3 pole branches, prices on request.

SPACE ONLY: For space only for future branch circuits, figure panel as having total number of branches including spaces and deduct **$5.00** list for each pole omitted.

FEDERAL NOARK DISTRIBUTION PANELBOARDS

Dead Front Pull Switch Panelboards



Ten 60 Ampere Pull Switch Branches

FEDERAL WURDACK DEAD FRONT PULL SWITCH PANELBOARDS

Are designed for power and light distribution in the most economic manner. Because of their unit construction in the commonly used sizes they are extremely flexible. With the complete enclosures and caps of each switch unit being molded of the highest grade phenolic, the overall size of each unit is slightly larger in size than the fuses they accommodate. The switches are operated by withdrawing the cap quickly and reinserting the cap into the body in the "Off" position.

Assemblies

The Federal Wurdack Dead Front Pull Switch units are assembled as twin units in several different types. The "S" Type which accommodates 30 Ampere 250 Volt only, and the "M" Type which accommodates 60 Ampere 250 Volt (convertible to 30 Ampere 250 Volt), are only 11 inches wide. This narrow width permits installation in standard 19 inch wide lighting panelboard boxes as shown on page 28. The "L" Type accommodates 100 Amperes 250 Volt fusing but is convertible to 30 or 60 Ampere 250 Volt. The "H" Type accommodates 30 or 60 Ampere 575 Volt fusing. Both the "L" and "H" Types are 14 inches wide and are regularly installed in a 24 inch wide by 7½ inch deep cabinet.

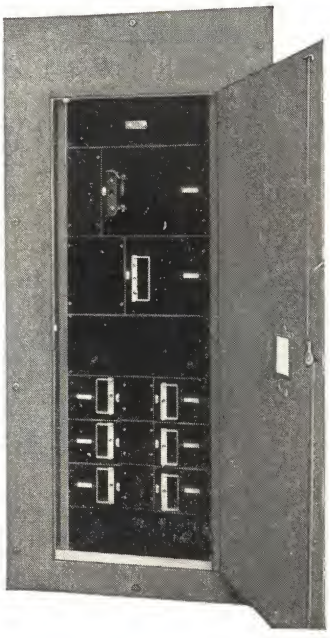
Mounting

The twin unit branches are all mounted on solid steel flanged, adjustable backs arranged for quick assembly in the panelboard box. The decreased weight of the assemblies, because of the use of molded phenolic in the complete pull switch units, permits easier handling.

Front

The fronts are of the conventional panelboard type. When specifying, indicate flush or surface mounting.

Dead Front Auto-Shift Panelboards



THE FEDERAL WURDACK DEAD FRONT AUTO-SHIFT PANELBOARDS

Represent a grouping of safety switch units which were designed for simplicity and reliability. The panelboard assemblies are designed for 2, 3 and 4 pole 230 Volt A.C. or 250 Volt D.C. mains and branches from 30 Ampere to 800 Ampere, inclusive. And also for 2 and 3 pole 575 Volt A.C. or 600 Volt D.C. mains and branches from 30 Ampere to 600 Ampere, inclusive.

Construction

The Federal Wurdack Dead Front Auto-Shift is a complete unit composed of an enclosure and hinged door. The door carries a blade assembly which breaks the circuit and automatically shifts to the "Off" position when the door is opened. The switch door is held closed in the "Off" position by a positive trigger catch. The fuses which are "dead" when the switch door is opened, are mounted on a base in the enclosure keeping this additional weight off the switch door. No live parts of the switch are exposed when the switch door is opened.

Operation

By holding the door handle to the extreme up position when closing the door the switch is closed in the "On" position. For "Off" position just close the door.

Mounting

The Federal Wurdack Auto-Shift switches are mounted over the bus bar on an adjustable solid steel, flanged type panelboard back.

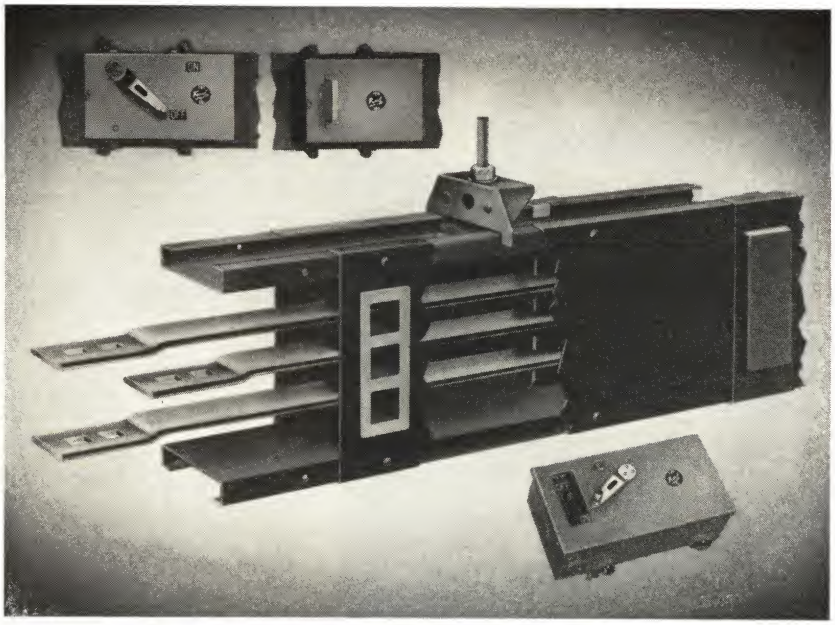
Front

The fronts are of the conventional panelboard type. When specifying, indicate flush or surface mounting.

FEDERAL NOARK BUS DUCT

Federal Noark power distribution bus duct (plug-in and feeder types) is a prefabricated, high capacity conductor designed for industrial secondary power distribution systems. It is made in standard 10-ft. units, ready to install.

Physically, bus duct consists of bare copper bus bars supported by insulators spaced at 12-inch intervals, within a metal housing. The insulators also serve as plug-in receptacles for load protective units.



Plug-in • upper left: type A fusible switch plug-in and cover operated fusible switch lower right: circuit breaker plug-in

Advantages

Maximum Safety—The rugged channel construction of the enclosure together with the insulated plug-in openings assures complete safety in applying and memoving plug-in devices.

Extreme Flexibility—Ready-made standardized sections, fittings and accessories may be combined in many ways to bring electric current to any point in a building. Plug-in openings are provided every 12 inches.

Minimum installation cost—Sliding type drop hangers provide a rapid and flexible hanging arrangement. Overlapping channel splice plates provide easy and accurate alignment when joining lengths and fittings.

Minimum engineering and planning time—Standardization of design permits the selection of lengths and fittings to suit any electrical distribution system to its exact requirements.

Plug-in Type

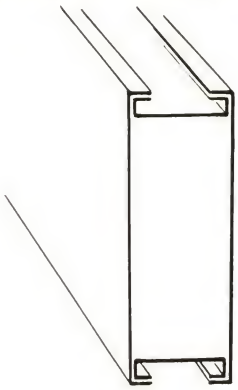
The plug-in duct, with capacities of 225 to 1500 amperes, is designed for branch circuits, or main supply circuits when the ampere capacity does not exceed 1500.

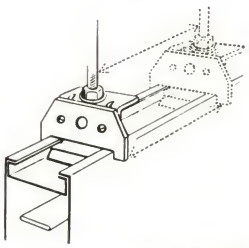
Feeder Type

The feeder duct made in capacities of 1250 to 2500 amperes, without the plug-in feature, is intended for main supply circuits.

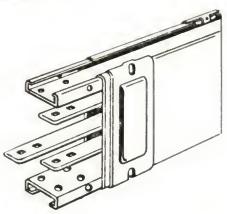
Fittings

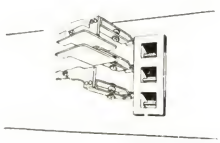
Fittings of many types, such as elbows, ties, cross-over, reducers, etc., are provided to complete the flexibility and adaptability of installation to plant layouts and floor plans.











SPECIAL FEATURES

Rugged Housing

Rigid channel construction.

Easy alignment by channel splice plates at each end.

Insulated Plug-in Receptacles

Maximum safety when plugging in or removing plug-in units. Plug-in stabs shielded by porcelain receptacle where they enter bus duct.

Fast, Easy Installation

Simple joining of duct sections.

Hanger slides to position, making it unnecessary to line up fixed hanger on duct with fixed overhead supports.

Sliding Receptacle Covers

Spring holds plug-in covers securely in place, and permits moving cover without tools.

Receptacles located on 12-inch centers, making every foot of duct usable.

Silver Plated Contacts

BULLDOG SAFtoFUSE

Convertible Distribution Panelboards and Cabinets

REMOVABLE HEAD TYPE FUSIBLE SWITCH BRANCH CIRCUITS

30 Amp. to 600 Amp.

600 Volts and Less

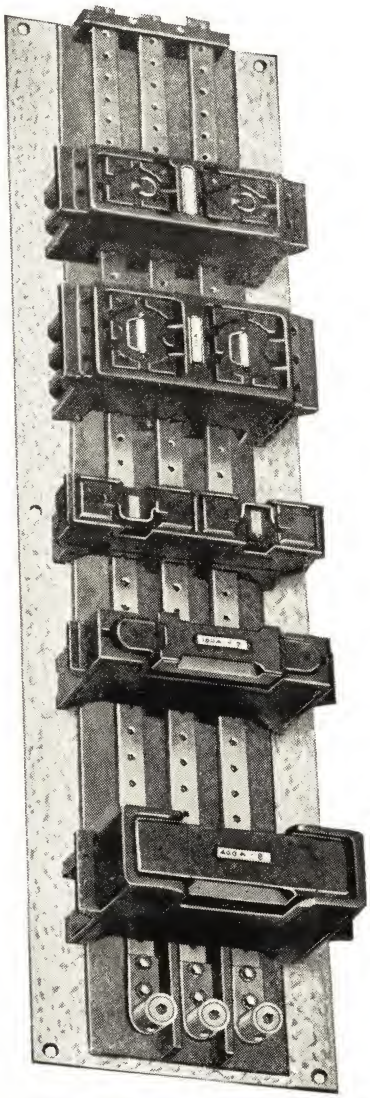


Above: a 12 circuit SAFtoFUSE panel, incorporating six three-pole double branch units. Blank filler plate at bottom covers main lugs.

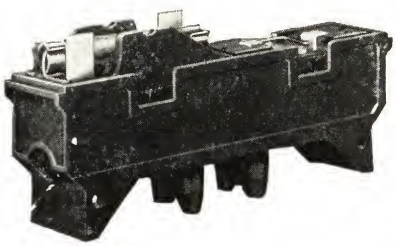
Due to their unit construction, SAFtoFUSE panels are extremely flexible. In an initial installation, a box larger than necessary for immediate requirements may be installed, equipped with ample mains and bus bars to provide for addition of future circuits. Then, as the need arises, additional circuit units may be installed, quickly and easily. Until needed, unused space is covered with blank filler units for safety and appearance.

SAFtoFUSE units are artistic and of uniform appearance. Each unit comprises a body which contains current-carrying parts directly connected to busbars, and the Head in which the switch blades and the fuse holders are mounted. Exceptionally heavy current-carrying copper parts are provided. Fuses are accessible only when the head has been completely removed from the unit base. All live parts are fully shielded against accidental contact.

Standardization of units permits substitution of circuits of different capacities; and when they are no longer needed in one panel they may be transferred to another.

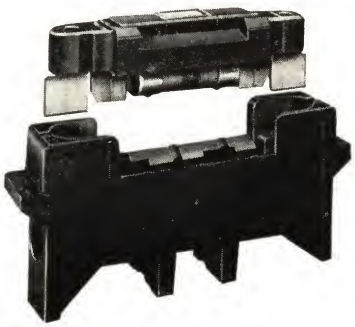


Above: A panel interior showing the bus bars with holes drilled and tapped on 1¼" centers to facilitate the mounting of circuit units of any size or type.



Above: A double branch or two circuit SAFtoFUSE unit. One branch head has been inverted and placed in the body as a positive indication that the circuit is open. Convertible 30-60-100 Amp.

Right: Single branch or single circuit SAFtoFUSE unit. The head has been disengaged from the body, showing switch blades and fuse. Convertible 30-60-100-200 Amp.



For More Detailed Information, Write for Condensed Catalog 511

BULLDOG SWITCHBOARDS

VACU-BREAK

COMPACT TYPE

PANELBOARDS

1. Vacu-Break Switch Arc Control.
2. Quick-Make and Quick-Break Switching.
3. Circuits H.P. Rated.
4. Door over each Circuit with Externally Operated Handles.
5. Compact Type Unit Construction.
6. Standardized Enclosures.
7. Suitable for Wall Mounting.



8. Space for Future Circuits.
9. BullDog Solderless Wire Grips.
10. BullDog Fuse Grips.
11. Flexible, Interchangeable and Convertible.
12. Complete Safety.
13. Capacities: 2 and 3 Pole, 30A to 600A inclusive, 575V and less.
14. Listed by Underwriters and fully protected by patents.

No Construction or Operating Details are incorporated in this catalog. For Descriptive Data on BullDog VACA-BREAK Panelboards, refer to Illustrated Bulletin 385.

Prices will be quoted on request, enabling engineers and specialists to make approximate estimates of costs and dimensions. Before making final decision or submitting written quotations, it would be advisable for estimators to submit their layouts and estimates, for confirmation. Detailed information on request.

BULLDOG UNIT-VERSAL TYPE 50 SWITCHBOARDS

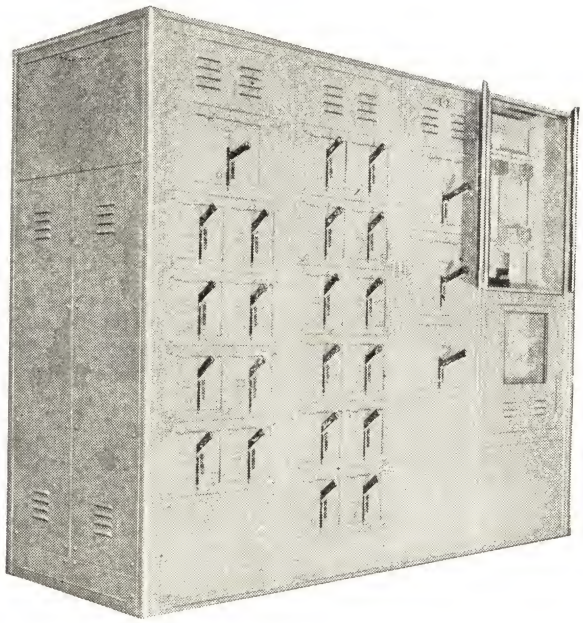
Dependable—Flexible—Sectional Construction

Heavy-Duty Switchboards have been taken out of the "drab utility" class by the introduction of the Unit-Versal Type 50. Here beauty and utility are successfully combined — and at no extra price.

All cover and mounting plates are flanged inward so that exterior surface is smooth, unbroken by raw-cut edges. Radius-formed trim pieces outlining the board provide a rounded contour. The Type 50 is sectionally constructed for flexibility, but the effect is always of an integral product.

Finish is a lustrous hammertone gray, against which black operating handles stand out in clean contrast.

The UNIT-VERSAL Type 50 Switchboard is listed as standard and labeled by Underwriters' Laboratories.



Planned for YOUR Needs

Only sound electrical practice for your application, limits the choice and arrangement of component devices. BullDog DF-30 Fusible Switch Units have proven their dependability in hundreds of installations. Circuit breakers used in Type 50 Switchboards are those of leading manufacturers. Meters and auxiliary equipment of any reputable make may be specified.

Standard Heights	90", 105"
Pull Boxes	13½", 15"
Section Widths	20", 28", 32", 40", 48"
Depths	40", 48",60"
Max. AC Voltage	600 V. (575)
Max. DC Voltage	Consult Factory
Max. Amp. Rating	4000 A.
Fusible Switches	30A. to 1200A.
Circuit Breakers	15A. to 4000A.

Accessible, Easy to Install

Cover panels, fastened to the electrically-welded frame sections by self-aligning clamps, can be quickly removed and replaced. The six-foot height of access doors permits free, uncramped movement during installation and inspection.

A pull box extends the full length of the top of the switchboard. Ample room behind unit is supplemented by integral wiring channels between adjacent sections.

Bus bars are silvered, pressure bolted, with solderless Wire Grips on the load side of units. Loadside bus riser to facilitate connections of BUS-tribution Duct are supplied where specified.

The DF-30 Switch Unit

Among the many features of the DF-30 Switch are . . . positive quick-break action . . . ball bearing guides for constant carriage alignment and smooth switching . . . simultaneous double-break — with fuses completely out of circuit in "off" position . . . separate contact section — two barriers between operator and circuit rupturing points . . . multiple safety interlocks and dual construction of sturdy actuating mechanism.

Send for descriptive bulletin containing complete information.

WARD LEONARD VITROHM DIMMERS
NON-INTERLOCKING—TYPE SRD DIMMERS



The Ward Leonard Vitrohm type dimmer is widely used for the control of lighting in theatres, churches, lodge rooms, auditoriums or wherever lighting control is desired.

The Vitrohm dimmer is a resistance type for operation on 110-120 volt A.C. or D.C., two or three wire circuit. All Ward Leonard dimmers are available in single and multi-plate assemblies with non-interlocking levers for small installations, or with interlocking levers for large assemblies where simultaneous control of several circuits is required.

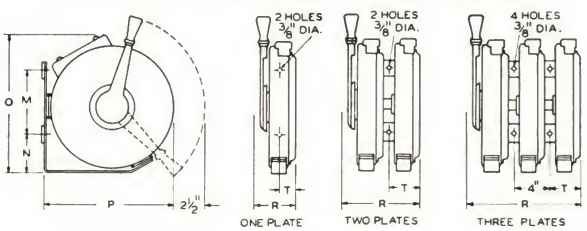
Dimmers may be arranged in various frameworks for walls, floor, back-of-board and other forms of mounting; open or mesh enclosed with steel fronts. They may also be arranged for remote control motor operation, and for color cycles lighting effects.

115 Volts, 2 Wire

Cat. No.	Watts Min.	Watts Max.	No. of Steps	Size & No. of Plates	Shpg. Wt. Lbs.	Price Each
71-102	60	150	32	1— 8″	10	**$23.00**
71-103	155	250	32	1— 8″	10	**23.00**
71-104	255	400	32	1— 8″	10	**23.00**
71-105	405	550	32	1— 8″	10	**23.00**
71-106	555	650	32	1— 8″	10	**23.00**
71-119	655	750	54	1—12″	20	**36.00**
71-107	755	1000	54	1—13″	20	**36.00**
71-108	1005	1350	54	1—13″	20	**36.00**
71-109	1355	1650	54	1—15½″	35	**50.00**
71-110	1655	2000	68	1—15½″	35	**50.00**
71-111	2005	2450	68	1—18″	40	**54.00**
71-120	2455	2700	68	1—18″	40	**54.00**
71-112	2705	3000	68	1—18″	40	**61.00**
71-113	3005	3300	54	2—15½″	60	**88.00**
71-114	3305	4000	68	2—15½″	60	**88.00**
71-115	4005	4900	68	2—18″	70	**102.00**
71-116	4905	6000	68	2—18″	70	**102.00**
71-117	6005	7350	68	3—18″	100	**149.00**
71-118	7355	9000	68	3—18″	100	**149.00**

For three-wire service use above list for each half of total load. Thus, 2000 watts, 3-wire, would require 2 No. 71-107.

EDGEWISE MOUNTING ACCESSORIES



Cat. No.	Size and No. of Plates	Approx. Dimensions, Inches O	M	N	P	R	T	Price Accessories Only
71-1	1— 8	10	5¼	2	9	3⅝	1⅛	**$3.30**
71-2	1—13	14¼	7¼	2½	13⅝	3⅝	1¼	**3.75**
71-3	1—15½	16⅞	10	2½	15⅞	3⅝	1¼	**4.15**
71-4	1—18	19⅜	11¾	2½	18⅝			**4.15**
71-5	2— 8	19⅜	11¾	2½	18⅝	3⅝	1¼	**6.60**
71-6	2—13	14¼	7¼	2½	13⅜	7⅝	3¼	**7.50**
71-7	2—15½	16⅞	10	2½	15⅞	7⅝	3¼	**8.25**
71-8	2—18	19⅜	11¾	2½	18⅜	7⅝	3¼	**8.25**
71-9	3—18	19⅜	11¾	2½	18⅜	11⅝	3¼	**12.40**

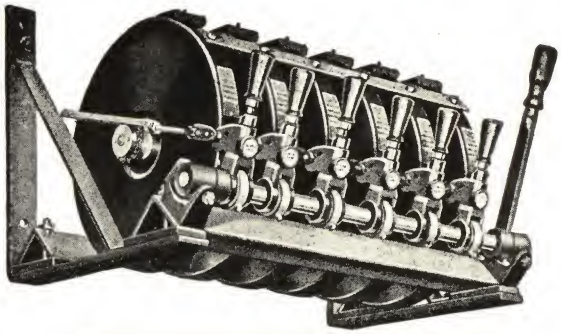
Accessories consist of necessary straps, bolts, etc. for mounting plates edgewise and are ordered by catalog number as listed.

When desired, plates will be assembled with edgewise accessories ready for mounting to wall or board at extra cost of **$3.30** per plate in addition to plate and accessories cost.

Spade Handle: No. 71-30, **$3.30** to facilitate one hand operation of several dimmers.

Conduit Fitting: To completely enclose terminals No. 71-40 for 8-inch **$2.50** each; 71-41 for larger plates **$4.95** each.

WARD LEONARD VITROHM DIMMERS
INTERLOCKING—TYPE RD DIMMERS



Open type Dimmer Bank with Plain Master Control, arranged for Wall Mounting.

Vitrohm interlocking dimmers are used where a number of circuits are to be controlled at one time. The dimmer is a resistance type for operation on 110/120 volt A.C. or D.C. two or three wire circuit. They are available in 15½-inch and 18-inch diameter sizes. Both sizes may be mounted in the same framework.

Each dimmer is equipped with an interlocking lever which may be interlocked to a cam controlled by a master lever for master control. The master lever may, in turn, be interlocked to a grand master lever for grand master control.

Estimating Prices

Cat. No.	Maximum Capacity Watts	Price Open	Price Enclosed
72-15	2200	**$91.00**	**$106.00**
72-18	3000	**113.00**	**128.00**
72-18	3600	**143.00**	**157.00**

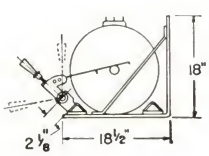
MASTER CONTROLS

Plain Master
1 to 4 dimmers..... **$9.25**
5 or more dimmers..... no charge

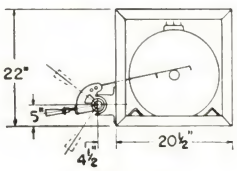
Non-interlocking Color Masters
Each Master controlling 1 to 4 dimmers..... **$9.25**
Each Master controlling 5 or more dimmers..... no charge

Interlocking Color Masters and Grand Master up to 15 dimmers..... **$250.00**
16 or more dimmers (per unit)..... **17.00**

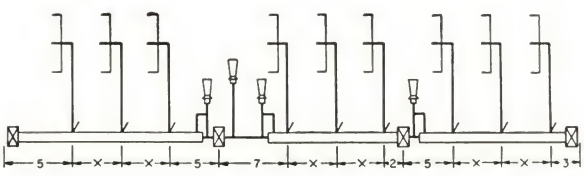
INTERLOCKING DIMMER BANK DIMENSIONS



Open



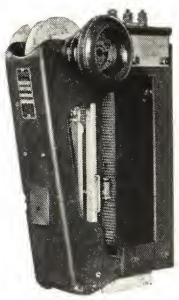
Enclosed



The approximate length of a dimmer bank may be calculated by multiplying the number of dimmers plus 1 by "X" inches and adding dimensions shown for each master or grand master lever. For Vitrohm dimmers X=4 inches.

WARD LEONARD DIMMERS

AUTRASTAT DIMMER



This is an autotransformer type dimmer used on 110/120 volt, 50-60 cycle A.C. circuits for the control of lighting in theatres, auditoriums, churches, lodge rooms or wherever lighting control is desired.

Each Autrastat will control, with equal facility, any lamp load from a 50-watt lamp to its maximum capacity of 4000 watts.

All Ward Leonard dimmers are available in single or multiple assemblies with non-interlocking levers for small installations, or with interlocking levers and master controls for large assemblies where simultaneous control of several circuits is required.

Dimmers may be arranged in various frameworks for wall, floor, back-of-board and other forms of mounting; open or mesh enclosed with sheet steel fronts. They may also be arranged for remote control motor operation and for color cycle lighting effects.

When ordering, specify total wattage of connected load, supply voltage, whether supply is two, three or four wire and type of mounting required.

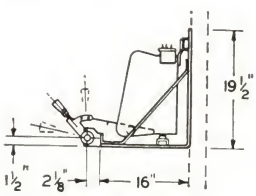
Non-Interlocking Autrastats

Cat. No.	Max. Watts	Approx. Wt. Lbs.	Price Open	Price Enclosed
76-14	4000	70	**$143.00**	**$194.00**

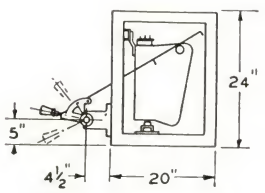
Interlocking Autrastats*

76-14	4000	90	**167.00**	**182.00**

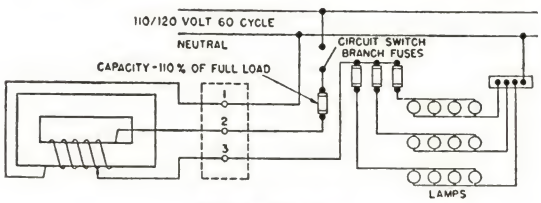
*Estimating price to be used for Banks of Six or more dimmer units.



Open Construction

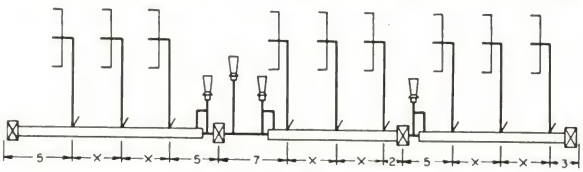


Enclosed Construction



Wiring Diagram

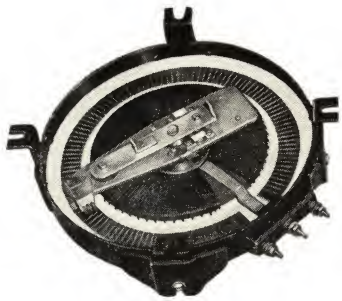
INTERLOCKING DIMMER BANK DIMENSIONS



The approximate length of a dimmer bank may be calculated by multiplying the number of dimmers plus 1 by "X" inches and adding dimensions shown for each master or grand master lever. For Vitrohm dimmers X=4 inches. For Radiastat dimmers X=5 inches.

WARD LEONARD DIMMERS

RADIASTAT DIMMER



The Radiastat combines all of the desirable features of the widely used Ward Leonard Vitrohm and Autrastat dimmers to make the most modern, efficient means of lighting control for theatres, auditoriums, churches, lodge rooms and other lighting installations requiring control.

Radiastats operate on 110/120 volt 50-60 cycle circuits. Each Radiastat will control, with equal facility, any lamp load from a 50-watt lamp to its maximum capacity of 5500 watts or 8000 watts.

Dimmers are available in sturdy single or multiple assemblies with non-interlocking levers for small installations, or with interlocking levers and master controls for large assemblies where simultaneous control of several circuits is required.

Dimmers may be arranged in various frameworks for wall, floor, back-to-board and other forms of mounting; open or mesh enclosed, with sheet steel fronts. They may also be arranged for remote control motor operation, and for color cycle lighting effects.

When ordering, specify total wattage of connected load, supply voltage, whether supply is two, three or four wire and type of mounting required.

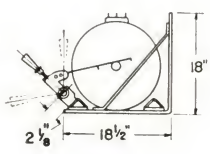
Non-Interlocking Radiastats

Cat. No.	Diameter Inches	Max. Watts	Approx. Wt. Lbs.	Price Open	Price Enclosed
76-35	13	5500	60	**$237.00**	**$288.00**
76-38	15½	8000	80	**380.00**	**431.00**

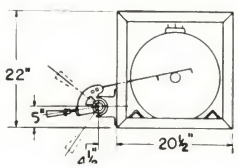
Interlocking Radiastats*

76-35	13	5500	80	**261.00**	**275.00**
76-38	15½	8000	100	**404.00**	**418.00**

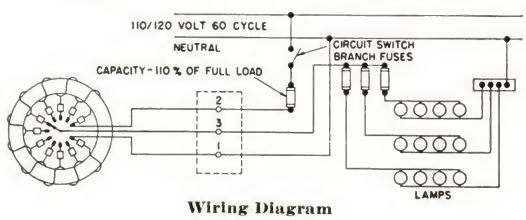
*Estimating price to be used for Banks of Six or more dimmer units.



Open



Enclosed



Wiring Diagram

WESTON CLAMP VOLT-AMMETER

MODEL 633—TYPE VA-1



The popular Weston Model 633, widely used for many years as a Clamp-Ammeter, is now available either as a Clamp-Ammeter for current measurements only or as a combination Clamp Volt-Ammeter for the measurement of amperes and volts. These versatile service instruments provide the user with a dependable time and money saving maintenance tool.

Safe and easy to use, the Clamp Volt-Ammeter combines in one instrument 3 a-c voltage ranges and 5 a-c current ranges. It is equipped with an adjustable pointer stop for the measurement of motor-starting currents. Providing coverage of the voltages and current most frequently encountered in industrial and utility service work, an ideal maintenance tool for on-the-job testing.

One pair of 5 foot insulated flexible leads are supplied with Type VA-1. Designed for either glove or bare hand use. Test clips are heavy rubber shielded.

Range: 1000/250/100/25/10 amperes a-c. 700/350/175 volts a-c.

Price, Model **633** Type VA-1 Clamp Volt-Ammeter (Incl. Potential Leads)....each **$110.00**
Leather Carrying Case .....each **13.50**

WESTON CLAMP-AMMETER

MODEL 633—TYPES A-1, A-2, A-3

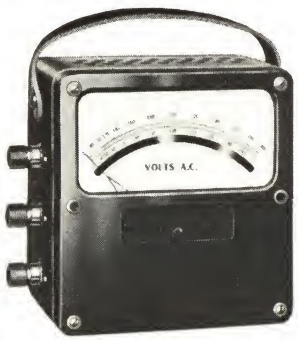


The Model 633 Clamp-Ammeter is of the same basic design as the Clamp-Volt-Ammeter except it is not provided with the voltage features or regularly equipped with the adjustable pointer stop. Current measurement at a distance from the clamping jaws can be conveniently made when used in conjunction with Model 9958 50-ft. Extension Cable. This is accomplished by removing the indicating instrument from the clamp-ammeter and inserting it in the receptacle provided on one end of the extension cable. The plug attached to the other end of the cable is then inserted in the clamp-ammeter. Model 9958 Extension Cable cannot be used with Model 633 Type VA-1 Clamp Volt-Ammeter.

Price, Model **633** Clamp-Ammeter—
Type A-1 500/250/100/50/25/10 amps. a-c **$100.00**
Type A-2 1000/500/250/100/25/10 amps. a-c **100.00**
Type A-3 2000/1000/500/250/100/50 amps. a-c **110.00**
Model 9958 50-ft. Extension Cable, Plug and Receptacle **72.00**
Leather Carrying Case..... **13.50**

WESTON TESTING INSTRUMENTS

MODEL 433 PORTABLE A.C. INSTRUMENTS



Shielded from external magnetic fields. Moving iron type instruments contained in bakelite cases with leather carrying handles.

Instruments can be left in circuit continuously without overheating, therefore no contact key is used.

Dimensions: 3¼x5 x5¼ inches; scale length, 4.04 inches. Weight 2½ pounds. Accurate within ¾ or 1%.

Voltmeters

Self-contained for ranges shown. Higher ranges obtained by using multipliers or Model 311 potential transformer in conjunction with a 150 volt instrument; for use on frequencies up to 125 cycles per second.

Range	Res. Ohms	Scale Div.	Price Each	Range	Res. Ohms	Scale Div.	Price Each
10	80	100	$54.00	30/15	336/168	150	$61.50
15	168	150	54.00	60/30	850/425	150	61.50
30	425	150	54.00	150/15*	5300/530	150	62.25
50	1140	100	54.00	150/75	5300/2680	150	62.25
75	2680	150	54.00	300/150	22000/11000	150	64.50
125	4400	125	54.75	450/300/	33000/22000/		
150	5300	150	54.75	150	11000	150	83.25
250	18200	125	56.25	600/300/	44000/22000/		
300	22000	150	57.00	150	11000	150	85.50
10/5	40/20	100	61.50	750/300/	55000/22000/		
20/10	160/80	100	61.50	150	11000	150	87.75

*The low range of this combination has an accuracy of 3 per cent.

Leather case, $13.50.

Ammeters

For use on frequencies up to 500 cycles per second, except triple range ammeters which have self-contained transformers limiting use to a.c. with frequencies up to 125 cycles.

Range	Approx. Res. Ohms	Inductance Henries	Scale Divs.	Price Each
1	0.48	0.00035	100	$52.50
1.5	0.20	0.000155	150	52.50
2	0.119	0.000085	100	52.50
3	0.053	0.000030	150	52.50
5	0.0197	0.0000135	100	52.50
10	0.007	0.0000029	100	52.50
15	0.0038	0.0000014	150	58.50
25	0.00155	0.00000062	125	58.50
30	0.00063	0.00000039	150	58.50
50	0.00038	0.00000013	100	58.50
2/1	0.12/0.48	.....	100	67.50
5/2.5	0.02/0.08	.....	100	67.50
10/5	0.0083/0.028	.....	100	67.50
20/10	0.004/0.0108	.....	100	73.50
3/1.5/0.75	.....	.....	150	112.50
5/2.5/1	.....	.....	100	112.50
10/5/1	.....	.....	100	112.50
10/5/2.5	.....	.....	100	112.50
15/7.5/1.5	.....	.....	150	118.50
20/5/2	.....	.....	100	118.50
30/7.5/3	.....	.....	150	118.50
50/20/5	.....	.....	100	118.50
50/20/10	.....	.....	100	118.50

Triple-range ammeters operate through self-contained multi-range transformers, therefore they cannot be used on direct current.

Leather case for single-, double- or triple-range ammeters, $13.50.

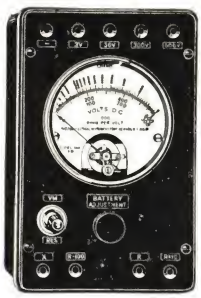
Milliammeters

Range	Res. Ohms	Scale Div.	Price Each	Range	Res. Ohms	Scale Div.	Price Each
15	1850	150	$52.50	250	6.0	125	$52.50
30	460	150	52.50	300	3.85	150	52.50
75	78	150	52.50	400	2.5	80	52.50
100	49	100	52.50	500	2.0	100	52.50
150	13	150	52.50	600	1.13	120	52.50
200	8.75	100	52.50	750	0.75	150	52.50

Milliammeters are available in double range combinations. Leather case for milliammeter, $13.50.

WESTON TESTING INSTRUMENTS

MODEL 564 TYPE 3-C VOLT-OHMMETER



Four Voltage Ranges: 0-3; 0-30; 0-300; 0-600 — all at 1000 ohms per volt.

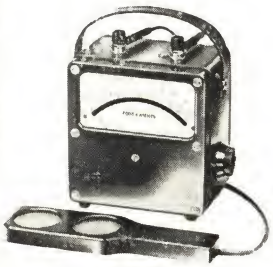
Four Resistance Ranges: 0-1000; 0-10,000; 0-100,000; 0-1,000,000 ohms, full scale.

A self-contained battery supplies the necessary potential. Changes in battery potential are compensated for by short-circuiting the resistance pin jacks of any range and adjusting pointer to zero ohms by turning the battery adjustment knob.

Voltage ranges are brought out to pin jacks. A toggle switch connects meter in circuit as a voltmeter, or ohmmeter. A pair of test leads is furnished. Dimensions: $5\frac{33}{64}$x$3\frac{45}{64}$x$2\frac{9}{16}$ inches.

Price, Model **564** Type 3-C.....each **$54.00**

MODEL 756 ILLUMINATION METER



A portable instrument for light measurements requiring a high degree of accuracy over broad range of light values. Ideal for research and routine work or as a master instrument for checking other light measuring instruments and devices. All types of commercial lighting can be read directly — no correction factors are necessary. Cosine filters are available to correct for the direction of light. Instruments equipped with *Viscor and Cosine correcting filters have the same response to light as the human eye, both as to color of the light and direction of it. The unusually wide mirror form of scale provides for accurate readings and eliminates parallax errors. Calibration is by direct comparison to accurate reference standard lamps.

Ranges are selected by a convenient range changing switch. The light target housing two **Photronic cells equipped with *Viscor or *Viscor and Cosine filters, with 6 foot extension cable connects to the color coded binding posts of the instrument. Additional cable may be added.

For measuring extremely low light intensities and for general lighting surveys Model 756 is available with ranges 6/12/60/120/600 foot candles. Other ranges available. Model 756 including the separable light target is regularly supplied in a sturdy leather carrying case with a compartment for the target light.

Range	Price
0-20/100/500 foot-candles incl. *Viscor and Cosine filters and leather carrying case	**$257.50**
0-20/50/500 foot-candles (*Viscor type) including leather carrying case	**249.00**
6/12/60/120/600 foot candles (*Viscor type) including leather case	**301.50**

MODEL 756 SUNLIGHT ILLUMINATION METER

This instrument incorporates ranges 0-100/1,000/10,000 foot candles and requires only one **Photronic cell equipped with quartz filter so that the ultra-violet portion of the spectrum is included in the light measured. The extra high range coverage is ideally suited for making comparisons of natural sunlight intensities, or for any survey where high light intensities must be measured with a high degree of accuracy.

Range	Price
0-100/1,000/10,000 foot-candles (Quartz filter) including leather case	**$243.00**

WESTON TESTING INSTRUMENTS

MODEL 614 FOOT-CANDLE METER



With this meter any user of light can analyze lighting conditions and determine the correct illumination for each particular and individual purpose.

This instrument is calibrated directly in terms of tungsten filament standard lamps. Requires no batteries, voltage or lamps; has indefinite life with permanent calibration. The **Photronic photo-electric cell or light target is hinged so that it can be lifted from the horizontal to the vertical position.

The instrument is always ready for instant use. To measure illumination on a horizontal plane it is only necessary to open cover, hold instrument in horizontal position with the cell or light target lying in its socket and then take the readings. The toggle switch simplifies switching to any of the 3 meter ranges so as to give a good scale deflection for any value of light intensity within maximum range of instrument. Cosine filters are available to correct for the direction of light. Instruments equipped with *Viscor and Cosine correcting filters have the same response to light as the human eye, both as to color of the light and the direction of it.

Housed in black bakelite carrying case with a hinged cover and strap handle. Length case, 7⅝ inches; height, 3⅜ inches; width, 2¼ inches. Weight 1.8 pounds.

Price, Model **614**

0-60/120/600 ft. candles (with *Viscor-filter) **$75.00**

0-100/250/500 ft. candles, *Viscor and Cosine correcting filters, complete..... **78.00**

MODEL 697 VOLT-OHM-MILLIAMMETER



Model 697 combines a selection of a-c and d-c voltage, direct current and resistance ranges in a light weight, pocket size case.

Ranges have been carefully selected to cover the majority of maintenance testing and inspection needs. The indicating instrument is a full sized 3¼-inch meter. All a-c and d-c ranges have a sensitivity of 1000 ohms per volt. A self-contained battery provides potentials for ohm ranges. Test leads furnished. Descriptive literature available upon request. Dimensions: $5\frac{9}{16}$x$3\frac{3}{4}$x$3\frac{9}{16}$ in. Approximate weight 1¾ lbs.

Volts A-C & D-C	Milliamperes D-C	Ohms Full Scale	Ohms Center Scale
750	75	500,000	3,500
150	7.5	5,000	35
15			
7.5			

Price, Model **697** Volt-Ohm-Milliammeter....**$49.50**

Carrying Case **9.00**

*VISCOR—A registered trademark designating the visual correction filter available only in Weston Photronic Cells and Illumination Meters. Instruments equipped with Viscor Filters, measure correctly the visual intensity of any lighting source.

**PHOTRONIC—A registered trademark.

WESTON TESTING INSTRUMENTS

MODEL 330 PORTABLE A.C. VOLTMETER



Iron core dynamometer type. Accurate within 1 percent at 60 cycles, 2 percent at 25 to 100 cycles. Contained in a mottled red and black bakelite case with hinged cover and leather carrying handle.

Low ranges, combined with an unusually high sensitivity, are possible in this type voltmeter. For use wherever current drain caused by instrument must be limited to a low value. Although the high sensitivities of the copper-oxide type voltmeter are not possible with this meter, nevertheless its accuracy is unaffected by wave form and variations in frequencies over relatively wide limits.

Ranges are changed by use of a self-contained range selector switch. To assure accurate readings and eliminate parallax errors, a knife-edge pointer and mirror scale are used.

Dimensions: 3 1/8 x 4 7/8 x 1 13/16 inches; scale length, 2.67 inches. Weight, 1¾ pounds.

Ranges	Sensitivity Ohms per Volt	Scale Div.	Price Each
125/25/12.5	21	50	**$75.75**
250/25/5	42	50	**99.75**
**125/25/5/1	21	50	**83.25**
150/30/15/1.5	21	75	**83.25**
150/50/10/1	21	50	**83.25**

**Conforms with A.R.A. specifications.
Leather case, **$7.50.**

WESTON STUDENT GALVANOMETERS

MODEL 375 STUDENT GALVANOMETERS



For student use in school laboratories and wherever a d.c. galvanometer of extreme sensitivity is not essential. Permanent magnet moving coil type. Has a sensitivity of approximately 22 microamperes per division; resistance, about 23 ohms. Scale is zero-center with 60 divisions; calibrated 30-0-30 in millimeter divisions. As a galvanometer for portable use instrument is mounted in 45 degree angle base; also without base for mounting in apparatus or on panels.

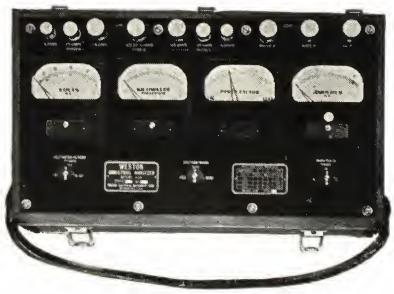
Dimensions: with mounting base, 3¾ x 3 1/32 x 3 17/32 inches; without mounting base—case, 3¼ inches; body, 2 9/16 inches. Scale length, 2.36 inches.

Price, Model **375** With Mounting Base.....**$18.75**

If desired without mounting base, deduct **$4.50** from price shown.

WESTON TESTING INSTRUMENTS

MODEL 639—TYPE 2 INDUSTRIAL ANALYZER



The ideal test equipment for public utility field service men, plant maintenance and efficiency men, electrical contractors and particularly those doing alternating current testing, checking or installation work. It is a self-contained unit, designed to analyze loads by measuring current, voltage and power in single and polyphase circuits as well as power factor in 3-phase, 3-wire, balanced circuits. A thorough analysis of plant load conditions with the Model 639 quickly detects overloaded or underloaded motors, indicating that relocating transformers or interchanging motors will effect considerable savings. It combines in its strong oak carrying case four Weston Model 610 instruments; a voltmeter, wattmeter, power factor meter and ammeter. The ammeter is equipped with an adjustable pointer stop which allows the maximum value of starting currents to be quickly determined. The stop enables the operator to set the pointer at the anticipated value of the starting current. The proper setting is that point at which the pointer makes only a perceptible movement as the transient current passes. Ordinary portable ammeters, without the pointer stop feature, do not permit the accurate measurement of these starting currents.

Accuracy: for voltage and current readings, 1 percent of full scale deflection. For overall readings of Analyzer, 2 percent.

Only a few simple connections are necessary to place the Model 639 in circuit and the maze of interconnecting wires necessary when individual meters are used, is eliminated. Connection diagrams and all necessary operating instructions are contained on one card in the removable cover.

Has self-contained potential ranges of 150/300/600 volts, current ranges of 5/25/125 amperes and corresponding wattage ranges. Higher ranges are possible by the use of potential and current transformers.

Power factor indications are for 3-phase, 3-wire balanced circuits only; .30 lag through unity to .80 lead.

On 220-volt 3-phase circuits the 5-ampere range will take care of loads up to 1 hp on the 2-kw. wattmeter scale; on the 25-ampere range up to 7½ hp on the 10-kw. scale; on the 125-ampere range up to 40 hp on the 50-kw. scale. At 440 or 550 volts the hp and kw. ranges are doubled.

A full technical description including connection diagrams is available upon request.

Dimensions: 18⅞ by 10⅞ by 6⅞ inches.

Approximate weight: 32 pounds.

Price, Model **639**—Type 2 Industrial Analyzer ..... each **$630.00**

WESTON TESTING INSTRUMENTS

MODEL 785—TYPE 6 INDUSTRIAL CIRCUIT TESTER



Model 785 Circuit Tester is an ultra-sensitive, multi-range instrument which covers a broad range of electrical measurements. The wide spread use of electronic devices and sensitive relays for controlling industrial processes and for automatic inspection has created a need for a multi-purpose low current drain instrument. This test unit is designed specifically for these applications although its use is by no means limited to this field of measurement.

D-C Voltage—Measurements from 10 millivolts to 1000 volts (20,000 ohms per volt) in full scale ranges of: 1/10/50/200/500/1000 volts. Accurate within 3%. 2% up to 500 volts; 3% at 1000 volts.

A-C Voltage — Measurements from 0.1 to 750 volts (1000 ohms per volt) in full scale ranges of: 5/15/30/150/300/750 volts. Accurate within 3%.

D-C Current—Measurements from 0.5 microampere to 10 amperes, in full scale ranges of: 50 microamperes, 1/10/100 milliamperes, 1/10 amperes. Accurate within 2%. Instrument is calibrated so that 100 mv shunts can be used for ranges above 10 amperes. Prices of shunts on request.

A-C Current — Measurements from 10 milliamperes to 10 amperes, in full scale ranges of: .5/1/5/10 amperes. Higher ranges with external current transformers. Accurate within 3% on 60 cycles. Slightly less accuracy on 25 and 133 cycles.

Resistance—Measurements from 0.5 ohms to 30 megohms in full scale ranges of: 3,000/30,000/300,000/3 meg. /30 meg. Center scale values are: 25/250/2,500/25,000/250,000 ohms. Self-contained batteries. Accurate within 2% of the linear arc length on any ohmmeter range.

Size and Weight—13x12½x5½ (34x32x14 cm.). Weight with batteries, oak case, etc.: 13½ lbs.

Model Model	Description	Price Each
785	In Oak Carrying Case	**$157.50**
785	In Steel Case for bench use	**127.50**

WESTON SWITCHBOARD INSTRUMENTS

MODEL 260 A.C. INSTRUMENTS



Accurate within 1 percent. Movable iron type; magnetically shielded. Surface type back connected, case of pressed steel, dull black finish. This instrument forms a part of a complete, matched line including voltmeters, ammeters, wattmeters, power factor meters, frequency meters and synchroscopes. Details furnished on request. Size of base, 7$\frac{31}{32}$ inches; projection from panel, 4$\frac{1}{32}$ inches; length of scale, 5.1 inches. Weight, 8 lbs.

Ammeters

Ammeters are for use on frequencies up to 500 cycles per second. Model 260 ammeter listed in one range only, 5 amperes; employed generally with current transformers.

Price, Model **260** Ammeter..... **$52.50**

Voltmeters

For use on frequencies up to 125 cycles per second. With external resistors for ranges above 300 volts.

Volts	Scale Div.	Price Each	Volts	Scale Div.	Price Each
150	30	**$56.25**	600	60	**$73.50**
250	25	**57.75**	750	75	**79.50**
300	30	**58.50**	-----	----	----------

MODEL 610 SWITCHBOARD A.C. INSTRUMENTS



Identical in construction with Model 610 D.C. instruments, described above. Power consumption: Voltmeters on 115 volts, 2.5 watts; on 60 cycles, 2.5 volt-amperes. Ammeter on 5 amperes, 1.1 watts; on 60 cycles, 1.4 volt-amperes.

Size at base, 4x4½ inches; projection from panel, ⅞ inch; scale length, 3½ inches. Weight, 2 pounds.

Ammeter

For use on frequencies up to 500 cycles per second. Listed in one range only; employed generally with current transformers; price shown covers instruments for currents up to 10 amperes with scales figured to correspond to transformers with which employed.

Price, Model **610** A.C. Ammeter..... **$49.50**

Voltmeters

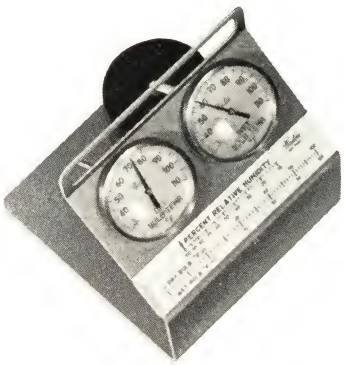
For use on frequencies up to 125 cycles per second. With external resistors for ranges above 300 volts. For the 750 volt range a type 12 resistance box mounted on studs at rear of instrument, is provided.

Volts	Scale Divs.	Price Each	Volts	Scale Divs.	Price Each
150	30	**$53.25**	300	30	**$55.50**

WESTON HUMIDITY INDICATOR

MODEL 2201 ALL-METAL HUMIDITY INDICATOR

For Laboratory and Industrial Production Control



This new easily read and versatile Weston Relative Humidity Indicator provides rapid and high-accuracy readings to meet the varied measuring requirements encountered in laboratory and industrial production control.

The dials of the Model 2201 indicates dry bulb and wet bulb temperatures; together they provide % relative humidity by means of the easy-to-use Slide Rule Calculator. With these three values many "determinations" may be made by direct reference or by reference to Psychromatic charts, tables and formulae of such air and comfort values as:

Dew point temperature— Total heat — Specific volume — Vapor pressure — Grains of Moisture/Cubic feet (Absolute Humidity) — Grains of Moisture/pound dry air (Absolute Humidity) — Comfort Zone Value in % — Effective Temperature — Etc.

Features of the Weston Humidity Indicator include:

All-Metal Construction: Minimizes breakage.

Large Open-Faced Dial: Easy to read.

Slide Rule Calculator: No arithmetic required, one movement of the slide rule produces % relative humidity reading.

Accuracy: Under ordinary conditions of temperature and humidity ±1% relative humidity, under rarely wet abnormally dry conditions within ±4%, under moist conditions ±2% relative humidity.

Wick: Wick on wet bulb may be removed or renewed without removing jar and jar may be removed without removing wick.

Supporting Stand: Clean, open and sturdy. It is at once a table type, a wall type or a shelf type.

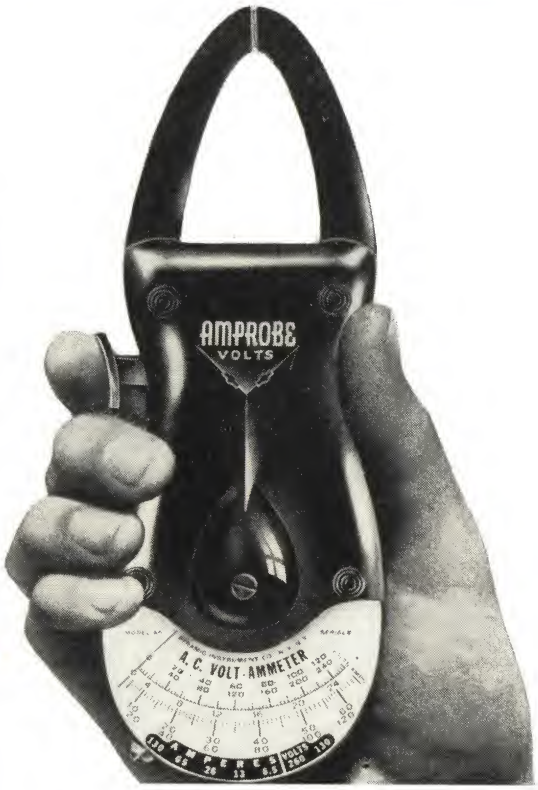
Auxiliary Fan Attachment: Where more rapid humidity indications are required Model 2201 can be equipped with Model 9917 Auxiliary Fan attachment. Model 9917 consists of a small fan, driven by a small d-c motor, which receives its power from four standard 1½ volt flashlight cells, "D" size. An "ON" and "OFF" switch is provided. The whole unit is contained in an assembly which clamps on any Model 2201.

Price, Model **2201** Humidity Indicator ..... each **$30.00**

Price, Model **9917** Auxiliary Fan Attachment ..... each **15.00**

Approx. wt., 1¼ lbs., with fan, 2½ lbs. Approx. size, 5x4¼x6⅛ inches.

PYRAMID "AMPROBE" SPLIT-CORE VOLT-AMMETER—POCKET SIZE



The "Amprobe" is the new **pocket-sized** split-core volt-ammeter for measuring currents and voltages without interrupting the circuit. With overall dimensions of 7⅛x2 $\frac{9}{16}$x1⅛ inches and weighing only 14 oz., the Amprobe is less than half the usual size and weight of such instruments. May be carried in the pocket or worn on the belt. Specifically designed for engineers, electricians, manufacturers of electrical equipment, technicians, motor repair shops, maintenance men. One-hand operation. Seven-position switch, which can be flipped by the little finger of the hand holding the instrument, selects the meter scale. Five current and two voltage ranges. Finger trigger on the side of the case opens the transformer probe jaws, enabling them to clamp around the conductor and thus measure the current in that circuit. Jaws are specially shaped to get into tight spots. To measure voltage, a pair of accompanying test leads are plugged into the pin jacks on the front of the case and then connected to the line. Large, jeweled D'Arsonval movement with alnico magnet encased in a dust-proof compartment. Accuracy of ± 3% of full-scale reading, including any variation due to position of the conductor in the jaws. Completely insulated. No metal parts come in contact with the hand or circuit. May safely be used on bare conductors carrying as much as 1000 volts. Jaws will accommodate bus bars up to ½x1½ inches or cables as large as 1⅛ inches in diameter. Comes complete with voltage test leads and genuine top-grain cowhide, zippered case.

Model No.	Meter Scales Amperes	Volts
A-5	6.5/13/26/65/130	130/260
A-5-1	6.5/13/26/65/130	150/600
A-6	10/25/50/100/250	150/600

IDEAL ELECTRIC TACHOMETER



Gives accurate check on production speeds. Two sizes for speeds up to 5000 r.p.m. Accurate to plus or minus 1 per cent of full scale deflection.

Consists of small generator coupled to electric meter. Variations in speed of generator are positively and accurately determined by the meter, which is capable of withstanding a momentary overload up to four times the maximum speed.

The meter is provided with two scales—"high" and "low," easily changed from one to the other with a switch on side of case. The units may be used together as a "Hand Type" Tachometer, or for many applications including permanent mounting. The generator and meter may be operated as a "Separable Type" and connected only by a two-conductor electric cord. Size of complete unit 3x7½x2½ inches, including ¾-inch shaft extension.

Weight, 3 lbs.

Cat. No.	Description	Wt. Lbs. Each	List Each
50–001T	0-2500 r.p.m.	3	**$152.90**
50–002T	0-5000 r.p.m.	3	**152.90**

FLUR-TEST FLUORESCENT FIXTURE TESTER



This new pocket-size tester quickly locates the trouble and indicates whether it is in the circuit, starter or the tube. It saves time of trial-and-error methods of replacing starters and tubes. If the fixture circuit is dead, you will know it immediately.

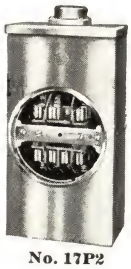
When you test with Flur-Test, you know definitely that a discarded tube or starter you throw away is bad. Bench testing of tubes and starters after a round of fixture maintenance is entirely eliminated. It is a light saver that pays for itself a dozen times over. The Ideal Flur-Test simply plugs into starter socket to make all three tests. Two models are available — one for fixtures with 15 to 40 watt tubes and one for fixtures with 85 to 100 watt tubes.

To test fixtures having starters behind tube, Flur-Test adapters are available.

Cat. No.	Description	Price Each
61-011	Flur-Test (15-40 watt)	**$10.90**
61-012	Flur-Test Adapter for above	**4.30**
61-013	Flur-Test (85-100 watt)	**13.10**
61-014	Flur-Test Adapter for above	**6.50**

FEDERAL NOARK SERVICE EQUIPMENT

STANDARDIZED CABINETS FOR SOCKET TYPE METERS



No. 17P2

POLYPHASE CABINETS

3 Wire 3 Phase—3 or 4 Wire 2 Phase—4 Wire 3 Phase

Galvannealed steel; gray enamel finish. Hubs and sealing rings, not included. Should be specified when required. Length 14⅜ inches; width 7½ inches; depth 4 inches.

With Base Blocks

Cat. No.	Terminal	*Circuit Closing	Type Meter	Price Each
17P2	7	3 Legs	CS-3-7-8-9†	**$30.48**
17P3	8	2 Legs	CS-2‡	**30.48**

Without Base Blocks

7P2	7	3 Legs	CS-3-7-8-9†	**23.48**
7P3	8	2 Legs	CS-2‡	**23.48**

†Self-contained. ‡Transformer or self-contained.

*When circuit closing attachment not required deduct **$0.60** list per pole.

Cabinets for CS3-CS7-CS8-CS9 and CS10 transformer type and CS10 self-contained meters. Prices on request.

GENERAL ACCESSORIES

SR	Sealing rings	**$0.90**
10-P	Black cover plate glass	**.70**
JB-1	Extra jaw and block for 5-terminal meter	**.90**
JB-2	Extra jaw and block for 6-terminal meter	**1.20**
ICS-7	Coupling strap for indoor horizontal troughs	**.60**
IEW-6R	Right-hand endwall for indoor horizontal troughs	**.60**
IEW-6L	Left-hand endwall for indoor horizontal troughs	**.60**
NT-1	Fourway junction box without side or end plates	**2.50**
NT-3	Trough terminal box with 2-2½-3-3½ knockout	**4.00**
NT-6	Side plate for NT-1	**.30**
NT-2-12	Vertical connecting channel 12 inches long for NT-1	**1.90**
NT-2-24	Vertical connecting channel 24 inches long for NT-1	**2.50**

CONDUIT HUBS AND NIPPLES

For Outdoor Meter Troughs

Size In.	Location	Type	Prefix to Cat. No.	Add to Price
¾	1 Top	Hub	C	**$2.00**
1	1 Top	Hub	D	**2.00**
1¼	1 Top	Hub	E	**2.00**
1½	1 Top	Hub	G	**3.20**
2	1 Top	Hub	H	**3.20**
¾	2 Top	Hub	P	**4.00**
1	2 Top	Hub	Q	**4.00**
1¼	2 Top	Hub	T	**4.00**
¾	1 Top 1 Bottom	Hub	J	**4.00**
1	1 Top 1 Bottom	Hub	K	**4.00**
1¼	1 Top 1 Bottom	Hub	L	**4.00**
1	1 Top	Nipple	DD	**2.00**
1¼	1 Top	Nipple	EE	**2.00**
1½	1 Top	Nipple	GG	**3.20**
2	1 Top	Nipple	HH	**3.20**

Standard nipples 1⅝ inches long.

FEDERAL NOARK SERVICE EQUIPMENT

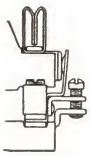
STANDARDIZED TROUGHS FOR SOCKET TYPE METERS

Standard Finish: Gray Enamel

STANDARD NO. 2—INDOOR HORIZONTAL MOUNTING

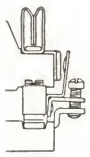


No. IH-213



Closed

Base Blocks with Bussing Terminals—Four Pressure Type Disconnects. Meter Sockets Formed by Extruding Cover.



Open

Troughs Complete with Base Blocks and Cover Socket

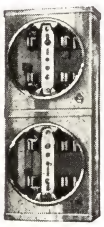
No. of Meters	Cat. No.	Shpg. Wt.Lb.	Price Each	Cat. No.	Shpg. Wt.Lb.	Price Each
	With Endwalls			Without Endwalls		
1	IH211	8½	$14.02	IH201	7¾	$12.80
2	IH212	14½	27.42	IH202	13¾	26.20
3	IH213	21	40.84	IH203	20¼	39.62

Troughs Complete with Base Blocks No Cover Socket

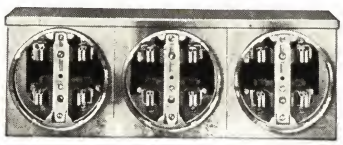
1	IH221	6¼	8.84	IH291	5¼	7.62
2	IH222	10¼	17.06	IH292	9½	15.84
3	IH223	14¼	25.30	IH293	13½	24.08

Meters on 10" centers.

OUTDOOR MOUNTING



No. OV-242



No. OH-243

Troughs Complete with Base Blocks No Cover Sockets

No. of Meters	Cat. No.	Vertical Shpg. Wt.Lb.	Vertical Price Each	Cat. No.	Horizontal Shpg. Wt.Lb.	Horizontal Price Each
1	OV241	7½	$14.02	OH241	7¼	$14.02
2	OV242	13½	27.74	OH242	13¼	27.74
3	OV243	19½	41.16	OH243	19¼	41.16
4	OV244	25½	54.86	OH244	25¼	54.86
5	OV245	31½	65.84	OH245	31¼	65.84
6	OV246	37½	79.26	OH246	37¼	79.26

Troughs Complete with Base Blocks No Cover Sockets

1	OV251	5¼	8.84	OH251	5	8.84
2	OV252	8¾	17.38	OH252	8½	17.38
3	OV253	12¼	25.60	OH253	12	25.60
4	OV254	15¾	34.15	OH254	15½	34.15
5	OV255	19½	40.24	OH255	19	40.24
6	OV256	22¾	48.78	OH256	22½	48.78

Meter Centers—Vertcal 8½"; Horizontal 7½"

ACCESSORIES—NO. 2 STANDARD

Cat. No.	Description	Wt.Lb. Each	Price Each
	Indoor Horizontal		
IC-21	Cover for 4-terminal meter	2¼	$5.18
IC-215	Cover for 5-terminal meter	2½	6.08
IC-216	Cover for 6-terminal meter	2½	6.40
	Outdoor Vertical		
OV-2	With socket for 4-terminal meter	2¼	5.18
OV-215	With socket for 5-terminal meter	2½	6.08
OV-216	With socket for 6-terminal meter	2½	6.40
	Outdoor Horizontal		
OH-2	With socket for 4-terminal meter	2¼	5.18
OH-215	With socket for 5-terminal meter	2½	6.08
OH-216	With socket for 6-terminal meter	2½	6.40

FEDERAL NOARK SERVICE EQUIPMENT

STANDARDIZED TROUGHS FOR SOCKET TYPE METERS

Standard Finish: Gray Enamel

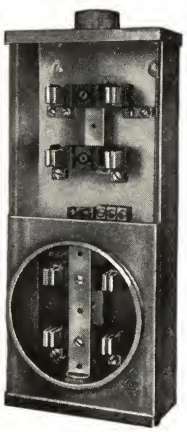
STANDARD NO. 3

No Base Blocks—Bussing terminals and load terminals munted on jaw blocks. Jaw blocks supported by steel brackets on rear wall of trough. No disconnects. Meter socket formed by extruding cover. Prices do not include sealing rings.

INDOOR

No. of Meters	Cat. No.	With Endwalls Shpg. Wt.Lb.	With Endwalls Price Each	Cat. No.	Without Endwalls Shpg. Wt.Lb.	Without Endwalls Price Each
1	IH381	7¼	$10.06	IH311	6½	.....
2	IH382	11¼	19.50	IH312	10½	.....
3	IH383	15¾	28.96	IH313	15	.....

Meters on 10" centers.



No. OV-342

OUTDOOR

Without Busses

No. Met.	Vertical Cat. No.	Vertical Wt. Lb.	Horizontal Cat. No.	Horizontal Wt. Lb.	Horizontal Price Each
	OV-		OH-		
1	341	6½	341	6¼	$10.66
2	342	11¼	342	11	20.72
3	343	16	343	15¾	30.78
4	344	20¾	344	20½	40.84
5	345	25½	345	25¼	50.30
6	346	30¼	346	30	61.58

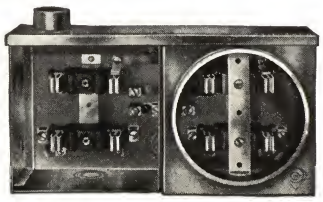
With Busses

2	362	11½	362	11¼	.....
3	363	16½	363	16¼	.....
4	364	21½	364	21¼	.....
5	365	26½	365	26¼	.....
6	366	31½	366	31¼	.....

Meter Centers—Vertical 8½"; horizontal 7½".

STANDARD NO. 3A

No Base Blocks—Same as described for Standard No. 3, except Standard No. 3A as two disconnects on load side. No disconnects on line side. Meter sockets formed by extruding trough covers.



No. OH-362-2

INDOOR TYPE

No. of Meters	Cat. No.	With Endwalls Shpg. Wt.Lb.	With Endwalls Price Each	Cat. No.	Without Endwalls Shpg. Wt.Lb.	Without Endwalls Price Each
1	IH381-2	7¼	$10.96	IH311-2	6½	.....
2	IH382-2	11¼	21.34	IH312-2	10½	.....
3	IH383-2	15¾	31.70	IH313-2	15	.....

Meters on 10" centers.

OUTDOOR TYPE

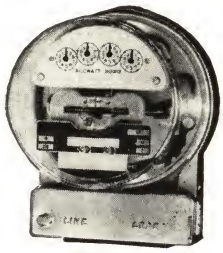
Without Busses

	Vertical		Horizontal		
1	OV341-2	6½	$11.58	OH341-2	6¼	$11.58
2	OV342-2	11¼	22.56	OH342-2	11	22.56
3	OV343-2	16	33.54	OH343-2	15¾	33.54
4	OV344-2	20¾	44.50	OH344-2	20½	44.50
5	OV345-2	25½	54.86	OH345-2	25¼	54.86
6	OV346-2	30¼	67.06	OH346-2	30	67.06
	With Busses					
2	OV362-2	11½	15.00	OH362-2	11¼	.....
3	OV363-2	16½	23.00	OH363-2	16¼	.....
4	OV364-2	21½	29.00	OH364-2	21¼	.....
5	OV365-2	26½	37.50	OH365-2	26¼	.....
6	OV366-2	31½	45.00	OH366-2	31¼	.....

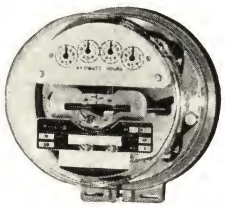
Meter Centers—Vertical 8½"; Horizontal 7½".

SANGAMO WATTHOUR METERS

TYPES JA AND JS SINGLEPHASE METERS



Type JA



Type JS

Type JA and JS 2 Wire Meters

Single Element, Self Contained, for 2 Wire Singlephase Meters

Amps.	Volts	Register Dials	Register Multiplier	List Price Type JA	List Price Type JS
5	120	4	1	**$22.07**	**$22.07**
15	120	4	1	**22.07**	**22.07**
50	120	4†	1†	**31.30**	**31.30**
5	240	4	1	**23.84**	**23.84**
15	240	4	1	**23.84**	**23.84**
50	240	4†§	1†§	**33.30**	**33.30**

15 ampere, 240 volt, 3-2 wire, list **$24.24***.

Type JA and JS 2 Wire Meters

Single Element, for use with Instrument Transformers For 2 Wire or 3 Wire Singlephase Circuits

Amps.	Volts	Register Dials	Register Multiplier	List Price Type JA	List Price Type JS
2½	120	4‡	1‡	**$23.44**	**$23.44**
2½	240	4‡	1‡	**25.16**	**25.16**

5 ampere meters, when specified, at no extra charge.

Type JA and JS 3 Wire Meters

Single Element, Self Contained—For 3 Wire Singlephase Circuits

Amps.	Volts	Register Dials	Register Multiplier	List Price Type JA	List Price Type JS
5	240	4	1	**$23.84**	**$23.84**
15	240	4	1	**23.84**	**23.84**
50	240	4†§	1†§	**33.30**	**33.30**

15 ampere, 240 volt, 3-2 wire, list **$24.24***.

Types JA and JS 3 Wire Meters

Single Element, for use with Instrument Transformers For 3 Wire Singlephase Circuits

Amps.	Volts	Register Dials	Register Multiplier	List Price Type JA	List Price Type JS
2½	240	4‡	1‡	**$25.16**	**$25.16**

5 ampere meters, when specified, at no extra charge.

*A 15 ampere, 240 volt, 3 wire meter connected for 15 ampere, 120 volt, 2 wire service. Includes parts for reconverting to 3 wire use.

†4 circle register with multiplier of 10, when specified, at no extra charge. §5 circle direct reading register, no extra charge.

‡Direct reading registers to include transformer ratios, when specified; 4 circle register, add **$2.60** list; 5 circle register, or special ratios, prices on request.

Cyclometer registers, when specified, add **$0.86** list.

480 to 600 volt meters, when specified, add **$7.00** list to 240 volt meters.

Type JH demand registers for 120 and 240 volt meters, when specified with meters:

Universal scales (EEI specifications).....add **$13.70**
Standard scales .....add **47.80**
Special scales .....add **49.80**

Type JGC cumulative demand registers for 120 and 240 volt meters, when specified with meters:

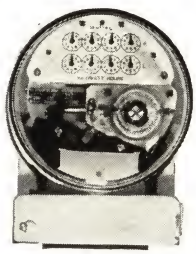
Universal scales (EEI specifications).....add **$64.10**
Standard scales .....add **70.30**

Types JH and JGC demand registers for 480 volt meters, add **$8.00** to above prices.

SANGAMO WATTHOUR METERS

METER-TIME SWITCH COMBINATIONS

For 240 Volt, 3 Wire, Singlephase Circuits



Type JVA-2



Type JMS

Types JMA-11 and JMS-11 Meter-Time Switch Combination

3 Wire Singlephase—Single Pole, Single Throw

Amps.	Volts	Register Dials	Register Multiplier	List Price Type JMA-11	List Price Type JMS-11
15	240	4	1	**$56.30**	**$56.30**
50	240	4	1	**65.76**	**65.76**

Types JMA-21 and JMS-21 Meter-Time Switch Combination

3 Wire Singlephase—Double Pole, Single Throw

Amps.	Volts	Register Dials	Register Multiplier	List Price Type JMA-21	List Price Type JMS-21
15	240	4	1	**$57.70**	**$57.70**
50	240	4	1	**67.16**	**67.16**

Types JV-11-A-2 and JV-11-S-2 Meter-Time Switch Combination

3 Wire Singlephase—With 2 Rate Register Single Pole, Single Throw

Amps.	Volts	Register Dials	Register Multiplier	List Price Type JV-11-A-2	List Price Type JV-11-S-2
15	240	*	1	**$73.50**	**$73.50**
50	240	*	1	**82.96**	**82.96**

Types JV-21-A-2 and JV-21-S-2 Meter-Time Switch Combination

3 Wire Singlephase—With 2 Rate Register Double Pole, Single Throw

Amps.	Volts	Register Dials	Register Multiplier	List Price Type JV-21-A-2	List Price Type JV-21-S-2
15	240	*	1	**$74.90**	**$74.90**
50	240	*	1	**84.36**	**84.36**

Types JVA-2 and JVS-2 Meter-Time Switch Combination

3 Wire Singlephase—With 2 Rate Register—No Contacts

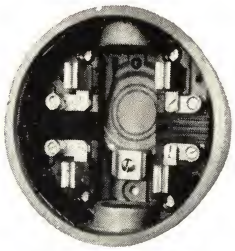
Amps.	Volts	Register Dials	Register Multiplier	List Price Type JVA-2	List Price Type JVS-2
15	240	*	1	**$70.06**	**$70.06**
50	240	*	1	**79.52**	**79.52**

*Two rate register.

One "on" and one "off" daily operations standard.

One additional set of "on" and "off" tripping levers, when specified, at no extra charge. For more than 1 additional set, prices on request.

SANGAMO ROUND SOCKETS COMPLETE WITH SEALING RINGS
(Special Socket Discounts Apply)



4 Terminal Socket with two threaded outlets

Die-cast round sockets are available with 4, 5 or 6 terminals, and can be furnished with or without circuit-closing devices. 4 and 5 terminal sockets are made for vertical or horizontal mounting and have either two or three threaded outlets; 6 terminal sockets are for vertical mounting only and have two threaded outlets. Breakouts are provided in the back of most styles; sizes are specified in the tabulated list.

DIE-CAST ROUND SOCKETS WITH 4 TERMINALS

Use these sockets with 2-wire and 3-wire Type JS singlephase self-contained meters and Types JMS and JV-S time switch-meter combinations, except for Types JV-11-S2 and JV-21-S2.

No. of Outlets Size of Pipe	Breakout in Back	Socket Depth	Without Circuit-Closing Device				With Circuit-Closing Device			
			Vertical		Horizontal		Vertical		Horizontal	
			Style No.	List Price	Style No.	List Price	Style No.	List Price	Style No.	List Price
Two 1-¼″	None	Shallow	821561	$3.00*	838841	$3.00*	837687	$3.65*	839165	$3.65*
Two ¾″	¾″/1″	Shallow	930577	3.00*	930580	3.00*	930583	3.65*	930586	3.65*
Two 1″	¾″/1″	Shallow	930578	3.00*	930581	3.00*	930584	3.65*	930587	3.65*
Two 1″	1″/1-¼″	Deep	1342431	3.05*	1342621	3.05*	1342433	3.70*	1342622	3.70*
Two 1-¼″	1″/1-¼″	Deep	839461	3.05*	839470	3.05*	839479	3.70*	839488	3.70*
Three ¾″	1″/1-¼″	Deep	839453	3.85†	839462	3.85†	839471	4.50†	839480	4.50†
Three 1″	1″/1-¼″	Deep	839454	3.85†	839463	3.85†	839472	4.50†	839481	4.50†
Two 1-¼″, One 1″	1″/1-¼″	Deep	839455	3.85†	839464	3.85†	839473	4.50†	839482	4.50†
Three 1-¼″	1″/1-¼″	Deep	839458	3.85†	839467	3.85†	839476	4.50†	839485	4.50†

*Bus Line Terminals when specified (factory shipment only) 10c net extra per socket. †Bus Line Terminals standard.

DIE-CAST ROUND SOCKETS WITH 5 TERMINALS

Use with Type JS meters on singlephase transformer installations using either one 2-wire or one 3-wire transformer. Use with Type LC-2-S meters on 3-wire network, 3-wire 2 phase and 3-wire 3 phase installations.

No. of Outlets Size of Pipe	Breakout in Back	Socket Depth	Without Circuit-Closing Device				With Circuit-Closing Device			
			Vertical		Horizontal		Vertical		Horizontal	
			Style No.	List Price	Style No.	List Price	Style No.	List Price	Style No.	List Price
Two 1-¼″	None	Shallow	934311	$3.40*	934314	$3.40*	934317	$4.05*	934320	$4.05*
Two ¾″	¾″/1″	Shallow	934321	3.40*	934324	3.40*	934327	4.05*	934330	4.05*
Two 1″	¾″/1″	Shallow	934322	3.40*	934325	3.40*	934328	4.05*	934331	4.05*
Two 1″	1″/1-¼″	Deep	1538852	3.45*	1538854	3.45*	1538853	4.10*	1538855	4.10*
Two 1-¼″	1″/1-¼″	Deep	934323	3.45*	934326	3.45*	934329	4.10*	934332	4.10*
Three ¾″	1″/1-¼″	Deep	934333	4.25†	934337	4.25†	934341	4.90†	934345	4.90†
Three 1″	1″/1-¼″	Deep	934334	4.25†	934338	4.25†	934342	4.90†	934346	4.90†
Two 1-¼″, One 1″	1″/1-¼″	Deep	934335	4.25†	934339	4.25†	934343	4.90†	934347	4.90†
Three 1-¼″	1″/1-¼″	Deep	934336	4.25†	934340	4.25†	934344	4.90†	934348	4.90†

*Bus Line Terminals when specified (factory shipment only) 10c net extra per socket. †Bus Line Terminals standard.

DIE-CAST ROUND SOCKETS WITH 6 TERMINALS

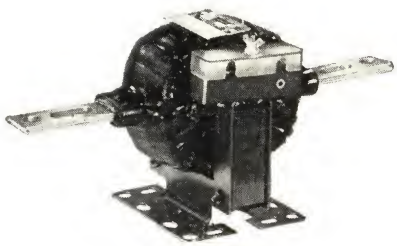
Use these sockets with Type JS meters on singlephase transformer installations using two 2-wire transformers, and Types JV-11-S-2 and JV-21-S-2 combination meters.

No. of Outlets Size of Pipe	Breakout in Back	Socket Depth	Without Circuit-Closing Device				With Circuit-Closing Device			
			Vertical		Horizontal		Vertical		Horizontal	
			Style No.	List Price	Style No.	List Price	Style No.	List Price	Style No.	List Price
Two 1-¼″	None	Shallow	929470	$3.80*	.....	.....	929473	$4.45*	.....	.....
Two ¾″	¾″/1″	Shallow	929474	3.80*	.....	.....	929476	4.45*	.....	.....
Two 1″	¾″/1″	Shallow	929475	3.80*	.....	.....	929477	4.45*	.....	.....
Two 1″	1″/1-¼″	Deep	1538856	3.85*	.....	.....	1538857	4.50*	.....	.....
Two 1-¼″	1″/1-¼″	Deep	929478	3.85*	.....	.....	929479	4.50*	.....	.....

*Bus Line Terminals when specified (factory shipment only) 10c net extra per socket.

SANGAMO INSTRUMENT TRANSFORMERS

TYPE MA-25 TRANSFORMERS—2500 VOLTS—10 TO 800 AMPERES



Type MA-25

Type MA-25 current transformer is designed for indoor service on circuits not exceeding 2500 volts. Insulation provided meets the A.S.A. 2.5 KV insulation class test requirements — 15 KV at 60 cycles and 45 KV full wave impulse. The A.S.A. meter accuracy classification of the Type MA-25 transformers at 60 cycles is Class 0.3, on Burdens B-0.1, B-0.2 and B-0.5. Single primary and single secondary. All capacities are physically interchangeable.

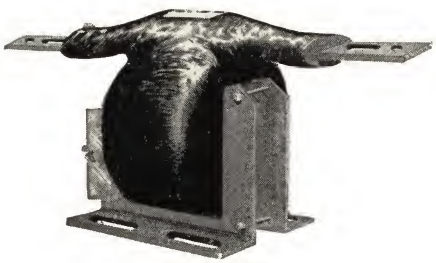
For Circuits Not Exceeding 2500 Volts

Primary Amps.	Ratio	Bus Connection Width	List Price	Primary Amps.	Ratio	Bus Connection Width	List Price
10†	2:1	1¼	**$48.00**	100†	20:1	1¼	**$48.00**
25†	5:1	1¼	**48.00**	200†	40:1	1¼	**52.00**
50†	10:1	1¼	**48.00**	400†	80:1	2	**56.00**
				600†	120:1	2	**62.00**
				800†	160:1	2¾	**66.00**

TYPE MA-50 TRANSFORMERS

5000 Volts—10 to 800 Amperes

Type MA-50 current transformer is designed for indoor service on circuits not exceeding 5000 volts. Insulation provided meets the A.S.A. 5.0 KV insulation class test requirements — 19 KV at 60 cycles and 60 KV full wave impulse. The A.S.A. meter accuracy classification of the type MA-50 transformers at 60 cycles is Class 0.3, on Burdens B-0.1, B-0.2, B-0.5 and B-2. Single primary and single secondary current transformers. All capacities are physically interchangeable.



Type MA-50

For Circuits Not Exceeding 5000 Volts

Primary Amps.	Ratio	Buss Connection Width	List Price	Primary Amps.	Ratio	Buss Connection Width	List Price
10†	2:1	1½	**$64.00**	100†	20:1	1½	**$64.00**
25†	5:1	1½	**64.00**	200†	40:1	1½	**..68.00**
50†	10:1	1½	**64.00**	400†	80:1	1½	**78.00**
				600†	120:1	2	**88.00**
				800†	160:1	2	**100.00**



Type MA-87

TYPE MA-87 TRANSFORMERS

8700 Volts—10 to 800 Amperes

The MA-87 current transformer is designed for indoor service on circuits not exceeding 8700 volts. Insulation provided meets the A.S.A. 8.7 KV insulation class test requirements — 26 KV at 60 cycles and 75 KV full wave impulse. The A.S.A. meter accuracy classification of the Type MA-87 transformers at 60 cycles is Class 0.3, on Burdens B-0.1, B-0.2, B-0.5 and B-2. Single primary and single secondary are provided in these wound type current transformers. All capacities are physically interchangeable.

For Circuits Not Exceeding 8700 Volts—MA-87 Single Primary Single Secondary

Primary Amps.	Ratio	Buss Connection Width	List Price	Primary Amps.	Ratio	Buss Connection Width	List Price
10†	2:1	1½	**$116.00**	100†	20:1	1½	**$116.00**
25†	5:1	1½	**116.00**	200†	40:1	1½	**122.00**
50†	10:1	1½	**116.00**	400†	80:1	1½	**134.00**
				600†	120:1	2	**150.00**
				800†	160:1	2	**160.00**

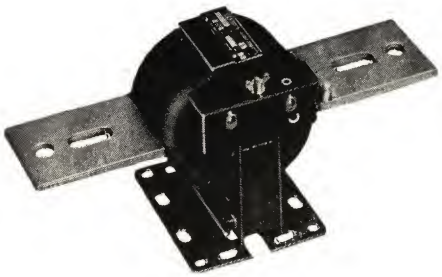
All above lists include A.S.A. Preferred Ratings for all purposes through 800 amperes.

†These items are Preferred Ratings as recommended by E.E.I. and A.E.I.C Meter Service Committees for billing metering. Prices and dimensions on other capacities on request.

SANGAMO INSTRUMENT TRANSFORMERS

TYPE M-6 TRANSFORMERS

600 Volts: 200 to 600 Amperes



The Type M-6 current transformer is designed for indoor service on circuits not exceeding 600 volts.

Transformer is of the wound type and has a single primary and a single secondary. The base mounting dimensions conform to recommended standards as given in EEI specification MS2.

A.S.A. Metering Accuracy Classification: Class 0.3 for B-0.1, B-0.2 and B-0.5 burdens at 60 cycles. Also has Class 0.5 rating at Burden B-0.2 under EEI specification MS2.

Primary Amps.	Ratio	List Price
200	40:1	**$58.00**
400	80:1	**62.00**
600	120:1	**68.00**

TYPE M-3 TRANSFORMERS

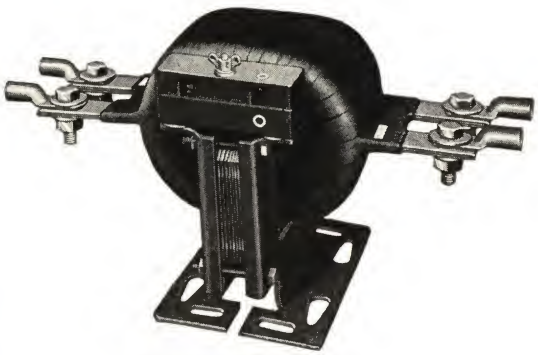
1200 Volts: 100 to 800 Amperes

The Type M-3 three-wire current transformer is designed for indoor service on three-wire singlephase circuits. Meets A.S.A. 1.2 KV insulation class test requirements — 10 KV at 60 cycles and 30 KV full wave impulse.

Transformer has a two coil wound primary for connection in a three-wire circuit. The secondary current is 5 amperes when full rated current flows in both primaries.

A.S.A. Metering Accuracy Classification: Class 0.3 for B-0.1, B-0.2 and B-0.5 burdens at 60 cycles.

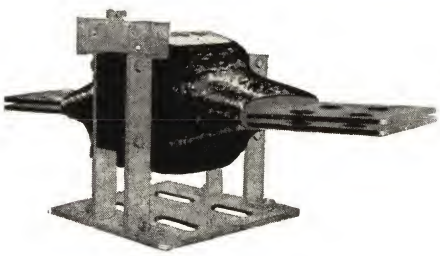
Primary Amps.	Ratio	Bus Connection Width	Shpg. Wt. Lbs.	List Price
100	20/20:1	1	25	**$80.00**
200	40/40:1	1¼	30	**86.00**
400	80/80:1	1½	40	**90.00**
600	120/120:1	2¼	45	**118.00**
800	160/160:1	2¾	50	**134.00**



Type M-3 Transformer

TYPES MB-50 AND MB-87 CURRENT TRANSFORMERS

Bus-Primary Type



MB-50; 5000 Volts, 1200 to 4000 Amperes; Impulse Level, Full Wave, 60 KV.

New design provides insulation to meet the A.S.A. 5.0 KV insulation test requirements — 19 KV at 60 cycles and 60 KV full wave impulse.

MB-87; 8700 Volts, 1200 to 4000 Amperes; Impulse Level, Full Wave, 75 KV.

New design provides insulation to meet the A.S.A. 8.7 KV insulation test requirements — 26 KV at 60 cycles and 75 KV full wave impulse.

The A.S.A. metering accuracy classification of Types MB-50 and MB-87 transformers for 60 cycles:

Burdens	B-0.1	B-0.2	B-0.5	B-2
Accuracy Class:				
1200 to 200 Amperes.....	0.3	0.3	0.3	0.6
3000 to 4000 Amperes.....	0.3	0.3	0.3	0.3

MB-50 and MB-87—Single Primary, Single Secondary

Primary Amps.	Ratio	No. Bus Bars	Width Bus Bar	List Price MB-50	List Price MB-87
1200	240:1	1	4	**$122.00**	**$160.00**
1500	300:1	1	4	**132.00**	**166.00**
2000	400:1	2	4	**144.00**	**176.00**
3000	600:1	3	4	**166.00**	**198.00**
4000	800:1	3	6	**176.00**	**220.00**

JEFFERSON MERCURY LAMP TRANSFORMERS



The liberal design and careful construction of Jefferson Transformers exceed the lamp manufacturer's specifications covering transformers. Years of continued use have proved the excellence of these transformers in thousands of installations. Steel mills, paper mills, motor car and body plants, foundries, textile mills, warehouses, tool rooms, gas stations and areas throughout the country are depending on them for daily uninterrupted service.

H-1 400-Watt—Indoor Type for Wall Mounting and Fixture Suspension Installation

Cat. No.	Primary Voltage	Freq.	Cap. V.A.	Net Wt. Lbs.	Price Each
232-811*	100-107-115-123	60	650	25¼	$15.35
232-813*	200-215-230-245	60	650	25¼	15.35
232-821†	100-107-115-123	60	450	27¾	20.90
232-823†	200-215-230-245	60	450	27¾	20.90

H-1 400-Watt—Weatherproof Wall Mounting Type For Outdoor Service

232-611*	100-107-115-123	60	650	29½	16.75
232-613*	200-215-230-245	60	650	29½	16.75
232-621†	100-107-115-123	60	450	30	22.35
232-623†	200-215-230-245	60	450	30	22.35

H-1 400-Watt—Weatherproof Pole Mounting Type For Outdoor Flood Lighting

232-711*	100-107-115-123	60	650	31½	29.00
232-713*	200-215-230-245	60	650	31½	29.00
232-721†	100-107-115-123	60	450	32	39.00
232-723†	200-215-230-245	60	450	32	39.00

H-1 400-Watt—Weatherproof Pole Mounting Type With Fixture Mounting Support

232-741*	100-107-115-123	60	650	33	35.50
232-743*	200-215-230-245	60	650	33	35.50
232-751†	100-107-115-123	60	450	34	48.00
232-753†	200-215-230-245	60	450	34	48.00

H-2 250-Watt—Indoor Type for Wall Mounting and Fixture Suspension Installation

232-841*	100-107-115-123	60	600	25	15.35
232-843*	200-215-230-245	60	600	25	15.35
232-851†	100-107-115-123	60	300	27½	20.90
232-853†	200-215-230-245	60	300	27½	20.90

Two-Lamp Transformers for 400-Watt Mercury Lamps Indoor Type

232-901†	100-107-115-123	60	875	46	30.45
232-903†	200-215-230-245	60	875	46	30.45

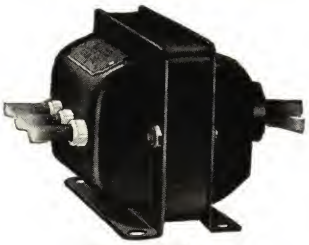
Outdoor Type

232-911†	100-107-115-123	60	875	56	54.00
232-913†	200-215-230-245	60	875	56	54.00

*Normal Power Factor Transformers.

†High Power Factor Transformers.

JEFFERSON CONTROL TRANSFORMERS



Standard Type

Jefferson control transformers were designed for all remote control equipment, including magnetic type switches for air conditioning, oil burners, automatic stokers, recording devices, gas, water and oil valve operation, fire alarms, low-voltage motors, low-voltage lighting, spark plug testers, etc.

The coils are layer built, automatically wound and have triple insulation. They are vacuum treated, impregnated and baked.

The automatic circuit breaker type provides absolute protection to the transformer and all apparatus connected to the secondary circuit. A push button permits quick and convenient resetting of breaker apparatus, which is non-tamperable.

Cat. No.	Capacity V.A.	Primary Volts	Primary Cycles	Secondary Voltage	Price Each
637-701	10	115	50–60	6	$5.94
637-711	25	115	50–60	6	8.18
637-721	50	115	50–60	6	10.24
637-731	100	115	50–60	6	12.48
637-741	150	115	50–60	6	13.60

Loom Warp Stop Type

Primary Leads Brought Out Through a Threaded Pipe Nipple

637-445	25	115/230/460/575	50–60	12	10.47
637-451	50	115/230/460/575	50–60	12	13.11

Primary Leads Brought Out Through a Threaded Pipe Nipple

637-201	25	115	50–60	24	9.18
637-221	50	115	50–60	24	11.24
637-231	75	115	50–60	24	12.59
637-261	100	115	50–60	24	13.48
637-271	150	115	50–60	24	14.60
637-291	250	115	50–60	24	16.30

Primary Leads Brought Out Through a Threaded Pipe Nipple

637-601	50	115	50–60	32	11.24
637-611	100	115	50–60	32	13.48
637-621	150	115	50–60	32	14.60
637-631	250	115	50–60	32	16.30

Primary and Secondary Leads Brought Out Through a Threaded Pipe Nipple

637-531	25	230/460	50–60	115	8.65
637-551	50	230/460	50–60	115	11.44
637-561	75	230/460	50–60	115	12.82
637-571	100	230/460	50–60	115	13.72
637-581	150	230/460	50–60	115	14.86
637-591	250	230/460	50–60	115	16.60

High Reactance Type

Standard Mounting Feet—Secondary Open Circuit 25 Volts

631-501	15	115	60	25	8.55
631-511	20	115	60	25	9.35
631-521	25	115	60	25	10.65
631-531	35	115	60	25	11.70

Mounted in Outlet Box Plate—Secondary Open Circuit 25 Volts

631-621	15	115	60	25	10.05
631-631	20	115	60	25	10.85
631-641	25	115	60	25	12.15
631-651	35	115	60	25	13.20

JEFFERSON TRANSFORMERS

POWER CIRCUIT DRY TYPE

Double-Wound Types



The double-wound and auto transformers provide a type for every demand. Separate enclosed compartments are provided for primary and secondary connections, which may be brought into the transformer through either rigid or flexible conduit or armored cable, to meet N.E.C. rulings.

Double-wound types enjoy a wide and varied demand. For signaling system of schools, factories, mines, etc., for remote control switching, for lighting purposes, to operate low voltage equipment from power lines, for insulating circuits from power and lighting supply lines, for emergency lighting systems, etc.

The high degree of efficiency resulting from the use of Jefferson Power Circuit Transformers is due largely to the vast experience of Jefferson engineers in the design and production of this type of transformer as well as transformers for the operation of mercury lamps, luminous tube (Neon) signs, oil burners, street lights, railway signals, controls and many other operations.

50/60-Cycle Double-Wound Transformers

230/460 Volt Primary — 230/115 Volt Secondary

Cat. No.	KVA Output	Overall Dimens., In. Height	Width	Depth	Net Wt.Lbs.	List Price
240-201	.050	6⅞	3 15/16	3 9/16	6	**$12.00**
240-211	.075	7¼	3 15/16	3 9/16	7	**14.00**
240-221	.100	7⅝	3 15/16	3 9/16	8	**15.30**
240-231	.150	9	4 11/16	4½	12	**18.00**
240-241	.250	10⅜	4 11/16	4½	17	**22.00**
240-251	.500	11½	5⅛	6 1/16	26	**31.00**
240-261	.750	13	5⅛	6 1/16	32	**39.00**
		575 Volt Primary — 115/230 Volt Secondary				
240-701	.050	6⅞	3 15/16	3 9/16	6	**13.00**
240-711	.075	7¼	3 15/16	3 9/16	7	**15.00**
240-721	.100	7⅝	3 15/16	3 9/16	8	**16.00**
240-731	.150	9	4 11/16	4½	13	**20.00**
240-741	.250	10⅜	4 11/16	4½	17	**24.00**
240-751	.500	11½	5⅛	6 1/16	26	**33.00**
240-761	.750	13	5⅛	6 1/16	32	**42.00**
		230/460 Volt Primary — 115/230 Volt Secondary				
240-401	1.0	13⅞	5⅛	6	38	**50.00**
240-411	1.5	13¾	8½	7⅝	61	**61.00**
240-421	2.0	14⅞	8½	7⅝	71	**74.00**
240-431	3.0	17¾	11	8⅜	100	**100.00**
240-441	5.0	20¾	11	8⅜	162	**145.00**
240-451	7.5	18⅞	11⅛	12¼	206	**200.00**
240-461	10.0	21¼	11⅛	12¼	280	**250.00**
240-471	15.0	22¾	13⅝	14¼	395	**348.00**
		575 Volt Primary — 115/230 Volt Secondary				
240-601	1.0	13⅞	5⅛	6	38	**52.00**
240-611	1.5	13¾	8½	7⅝	61	**64.00**
240-621	2.0	14⅞	8½	7⅝	71	**78.00**
240-631	3.0	17¾	11	8⅜	100	**104.00**
240-641	5.0	20¾	11	8⅜	162	**152.00**
240-651	7.5	18⅞	11⅛	12¼	206	**210.00**
240-661	10.0	21¼	11⅛	12¼	280	**262.00**
240-671	15.0	22¾	13⅝	14¼	395	**364.00**

JEFFERSON AUTO TRANSFORMERS

AUTO TYPE POWER CIRCUIT TRANSFORMERS

Auto transformers, also commonly known as single-wound transformers, compensators or balance coils, have a limited application for making voltage transformations. In instances where this type of transformer can be utilized, an appreciable saving in cost may be effected as compared with a double-wound transformer installation.

Auto transformers may be installed in compliance with the National Electrical Code for purposes and under conditions as follows:

(a) For derived lighting systems where the system supplied contains an identified grounded wire which is solidly connected to a similar identified grounded wire of the supply system.

(b) For use in motor starters.

(c) For supplying circuits wholly within apparatus which also contains the auto transformers.

(d) For fixed voltage adjustment on existing unidentified power circuits.

Installations in which auto transformers are used as balance coils for derived lighting systems do not conform to the National Electrical Code.

Standard auto transformers are furnished only with a ratio of 230 volts to 115 volts.

50/60-Cycle Auto Transformers

Voltage Ratio: 115/230 Volts

Cat. No.	KVA Output	Overall Dimens., In. Height	Width	Depth	Net Wt.Lbs.	List Price
241-101	.100	6⅞	3 15/16	3 9/16	6	**$12.00**
241-111	.150	7⅛	3 15/16	3 9/16	7	**14.00**
241-121	.250	7⅝	3 15/16	3 9/16	8	**18.00**
241-131	.500	10⅜	4 11/16	4½	17	**22.00**
241-141	.750	10⅞	5⅛	6	20	**27.00**
241-151	1.0	11½	5⅛	6	26	**31.00**
241-161	1.5	13	5⅛	6	31	**39.00**
241-171	2.0	13½	5⅛	6	36	**47.00**
241-181	3.0	13½	8½	7⅝	56	**58.00**
241-201	5.0	15⅜	8½	7⅝	73	**82.00**
241-231	7.5	18¼	11	8⅜	112	**110.00**
241-241	10.0	20⅝	11	8⅜	155	**137.00**

General Information

The transformers listed on this page are normally used as stepdown units, but they may be employed to make the reverse transformation by using the low voltage windings as the primary.

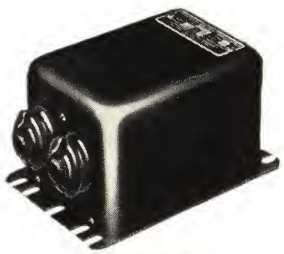
When desired, transformers with a single secondary voltage can be supplied with "off and on" switch, single receptacle, patented circuit breaker or overload and short circuit protection.

Isolating Service

Jefferson (Double Wound) Transformers can be used to isolate (1) A lighting circuit from a power circuit; (2) A single wire lighting circuit such as is used in mines; (3) Telephone and signal circuits from power circuits; (4) Re-establishing ground at some variant of potential other than that provided on the power circuit; and (5) Eliminating any circuit ground.

JEFFERSON OIL BURNER IGNITION TRANSFORMERS

115 Volts, 60 Cycles, A.C.



Nos. 638-251 and 638-271



Nos. 638-331 and 638-341

The introduction of various types of burners has required the development of different types of transformers. There is a transformer for every specific application — 5000, 10000, 12000, and 15000-volt ratings; for intermittent and continuous service; grounded, mid-point grounded, balanced mid-point grounded, and insulated secondaries; and in core and shell type designs.

The cool operation is accomplished by exacting requirements, liberal design throughout, plus the use of quality materials of adequate size which results in long transformer life.

Equipped with built-in radio barrier to eliminate the possibility of objectionable radio interference.

Nos. 638-251, 638-231, 638-331, 638-261, 638-271, 638-341, including special voltages and frequencies, are assembled in the Jefferson streamlined case. This case is of heavy drawn steel of exceptional durability, treated to resist rust and finished in a high lustre long-wearing black enamel. Universal mounting brackets of sturdy design are provided, — which feature is especially desirable from a replacement standpoint.

A junction box of liberal proportions is built into the top of the case. Knockouts are provided in two sides and in the end of the case for convenient entrance. Quick and easy splicing results and there is ample space for additional wiring which any installation may require. Primary leads 24 inches long are standard on all types.

Cat. No.	Type of Core	Cap. V.A.	Secondary Volts	Secondary M.A.	Max. Gap Setting Inches	No. of Sec.	Approx. Shpg. Weight
			Grounded				
638-171	Core	250	10000	23	3/16	1	14
638-281	Shell	125	5000	20	1/8	1	9
638-181	Core	150	6000	20	1/8	1	9
			Mid-Point Grounded				
638-251	Core	250	10000	23	3/16	2	14
638-331	Core	250	10000	23	3/16	2	14
638-271	Core	250	12000	20	1/4	2	14
638-231	Core	250	10000	23	3/16	2	15
638-261	Core	250	10000	23	3/16	2	14
638-291*	Shell	450	15000	30	(2) 1/8	2	22
638-321	Core	250	10000	23	3/16	2	12½
			Dual				
638-221	Shell	250	12000	20	(2) 1/8	2	14

*For heavy duty type — add .007 to catalog number — price and size on application.

H&H MOTOR CONTROLS

SMALL MOTOR STARTING SWITCHES

TYPE "NF"

Discount Schedule "MS"



No. 6808



No. 6808-F



No. 8808

Double-Pole — Single-Phase

2 H.P., 115–600 Volts — 30 Amp. 250 V., 20 Amp. 600 V.

Cat. No.	Description	Box	Wt. Each	Price Each
6808	Surface, with Metal Box..	34	1½	**$2.15**
6808-F	Flush, with Plate, no Box	....	¾	**2.10**
6808-U	Switch Unit for 6808.....	....	½	.....
6876	Switch Unit, Ba'lite Base	....	6 oz.	**1.50**

Switch Unit and Flush style fit standard, deep wall cases. Plate dimensions, No. 6808-F, 2¾x4½".

Four Pole

2 H.P. 230, 460, 575 Volts A.C. 2 Phase
30 Amp. 250 Volts, 20 Amp. 600 Volts

8808	Surface, with Metal Box.....	35	2¼	**$8.00**
8808-E	For Hazardous Locations, Cast Box	167	5	**25.00**
8808-F	Flush, with Plate, Metal Box	31	3	**9.70**
8808-U	Switch Unit for 8808.....	....	½	**6.55**
8808-W	Weatherproof, Cast Box	265	5	**16.05**

†Plate dimensions 8808-F 4½ x 5¼ inches.

Three-Way

30 Amp. 250 Volts

6814	Surface, with Metal Box..	34	1½	**$2.15**
6814-F	Flush, with Plate, no Box	....	¾	**2.10**
6814-FH	Float, with Metal Box.....	34	1½	**3.75**
6877	Switch Unit, Ba'lite Base	....	6 oz.	**1.50**

Switch Unit and Flush style fit standard, deep wall cases.

Plate dimensions, No. 6814-F, 2¾x4½".

Listed as standard by The Underwriters' Laboratories.

MANUAL MOTOR STARTING SWITCHES

TYPE "NF"

Discount Schedule "MS"



No. 7810

Front lever operated. The stationary contacts and terminals are made in one piece with welded silver buttons. There is a double break in each pole. Each break is in a separate arc chamber and the arc is efficiently snuffed.

A small, sturdy plastic base fully encloses the mechanism.

Three Pole—Three Phase, A.C. Only

2 HP, 110-600V. AC—30 Amp. 250V., 20 Amp. 600V. AC

Cat. No.	Description	Box	Wt. Lbs. Each	Price Each
7810	Surface, with Pressed Metal Box	34	1½	**$5.30**
7810-E	For Hazardous Locations, with Cast Metal Box.....	267	6	**13.35**
7810-F	Flush with Plate, No Box..	....	¾	**6.15**
7810-U	Switch Unit only.....	....	½	**4.75**
7810-W	Weatherproof, with cast metal Box	265	6½	**13.35**

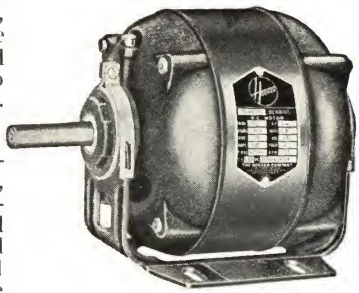
HOOVER ELECTRIC MOTORS



Rigid Mount

Custom-built Hoover motors embody all the latest advancements in the fields of motor material and design. These features, coupled with expert workmanship, are your assurance that with proper use and a little care they can be depended upon to give many years of satisfactory service.

Designed for hard-starting, continuous-duty applications such as compressors, machine tools, pumps and farm machinery. They have excellent electrical and mechanical characteristics and while all units are offered with a rigid base and ball bearings, some of the smaller units can be furnished with a resilient base and sleeve bearings.



Resilient Mount

Capacitor Start Motors

All motors below are built to NEMA mounting standards

TYPE - CAPACITOR START						Rigid Mounted				Resilient Mounted			
						Ball Bearing		Sleeve Bearing		Ball Bearing		Sleeve Bearing	
HP	RPM	Volts	Cycles	K-C Frame	NEMA Frame	Cat. No.	List Price	Cat. No.	List Price	Cat. No.	List Price	Cat. No.	List Price
¼	1725	115	60	1142A	56	11152	$ 29.20	11452	$26.70	12152	$30.60	12452	$28.05
⅓	1725	115/230	60	1162A	56	11158	39.65	11458	37.05	12158	41.05	12458	38.50
	3450	115/230	60	1152A	56	11160	41.15						
½	1725	115/230	60	1182A	56	11164	47.90	11464	44.70	12164	49.35	12464	46.10
	3450	115/230	60	1162A	56	11166	47.90						
	1725	115/230	60	1182A	56	11164D†	50.45						
	1725	115/230	60	1182A	56	11164S‡	51.05						
½	1725	115/230	60	1188	66	11168	50.45						
¾	1725	115/230	60	1218	66	11174	64.00	11474	60.25				
	3450	115/230	60	1188	66	11176	64.00						
1	1725	115/230	60	1259	203	11180	88.00						
	3450	115/230	60	1218	66	11182	76.25						
	1725	115/230	60	1251	203	11180D†	92.55						
1½	1725	115/230	60	12710	204	11184★	117.70						
	3450	115/230	60	1259	203	11186	97.05						
2	3450	115/230	60	12510	204	11188	121.85						

1) Standard rotation: Counter-clockwise viewed from end of motor opposite shaft extension. Easily reversible. 2) Single voltage motors supplied with terminal box in end bell opposite shaft extension. Dual voltage motors supplied with outlet box on band and less terminal box in end bell. 3) Ventilated drip-proof motors: Temperature rise 40°C continuous. 4) Sleeve bearing motors are suitable for horizontal operation only.

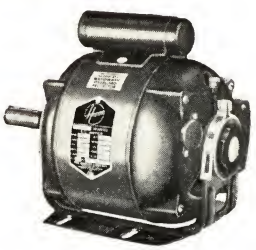
KEY: ★Denotes capacitor-start and run motors.
†Denotes double shaft extensions.
‡Denotes motor suitable for ceiling mounting equipped with side mounted condenser and cord, plug and switch. Excellent for many machine tool applications.

Prices subject to change without notice.

When ordering specify CAT. NO. and also H.P., speed, voltage, bearings, and mounting.

Motor Service—Hoover motors are backed by a World-Wide Service Agency System which includes over 200 authorized repair centers, strategically located throughout the United States. Polyphase Motors available—information on request.

FURNACE BLOWER MOTORS



Specifically designed Hoover motors for furnace blower applications have all been tested and approved by Underwriters' Laboratories insofar as their thermal protection is concerned. Built to meet NEMA mounting standards, these single speed, open, drip-proof motors are designed for a 40° C. temperature rise. Standard rotation is CCW facing the end of the motor opposite the shaft extension. This, however, can easily be reversed.

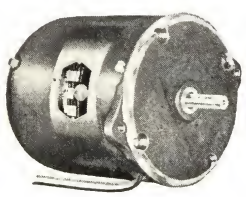
Split Phase

HP	Speed RPM	Frame	Type	Voltage	Freq.	Cat. No.	List Price
⅛	1725	1142A	SPRA	115	60	22546	$25.05
¼	1725	1152A	SPRA	115	60	22552	26.40
⅓	1725	1162A	SPRA	115	60	22558	29.75

Capacitor Start

⅓	1725	1162A	KPRA	115	60	22458	$39.45
½	1725	1182A	KPRA	115/230	60	22464	48.05
¾	1725	1218	KPRA	115/230	60	22474	65.25

OIL BURNER MOTOR



Hoover oil burner motors in ratings of ⅛ and ⅙ H.P. are built to conform with NEMA mounting standards. Smooth end bell contour in conjunction with compact motor design is a distinguishing characteristic of these quiet, smooth-running, streamline units. Top quality bronze bearings with adequate lubrication facilities assure long service life. Designed for reversible rotation, these units are all provided with manual thermal protectors which have been tested and approved by Underwriters' Laboratories.

HP	Speed RPM	Frame	Type	Voltage	Freq.	Cat. No.	List Price
⅛	1725	11214	SPFM	115	60	16540R	$25.20
⅙	1725	11314	SPFM	115	60	16546R	26.20

FEDERAL NOARK INDUSTRIAL CONTROLS

Bulletin 403—"Protectit" Manual Starters

A SMALL MANUAL STARTER, 1 H.P. 115-230V. A.C. SINGLE PHASE OR ¾ H.P. 115-230V. D.C.

Cat. No.	Description	List Price
403U1	Open type, S. P.	$5.80
403U2	Open type, D. P.	6.60
403Y1	With flush plate for yoke mounting, S. P.	6.30
403Y2	With flush plate for yoke mounting, D. P.	7.10
403A1	Sheet steel enclosure, S. P.	6.90
403A2	Sheet steel enclosure, D. P.	7.70

List price includes one heater. Separate heaters list for $0.70 each.



No. 403A1

IMPORTANT ADVANTAGES OF THE PROTECTIT

Double-Break Silver Contacts: Double-break silver button contacts are riveted to hi-tenso bronze contact springs. This construction combined with quick-break insures high interrupting capacity, positive contact, and long operating life.

Automatic Reset After Tripping: When overload occurs, the handle on the "Protectit" trips to the "Off" position and a separate operation to reset or relatch is not necessary. To restart the motor, merely throw the handle to the "On" position.

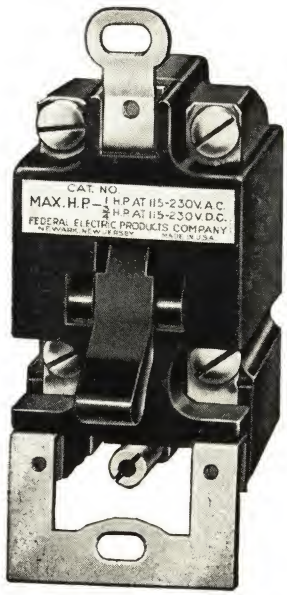
Trip Free Handle: The sturdy phenolic resin handle on the Protectit links through a simple toggle mechanism to the tripping element. On overload, the bimetallic strip flexes and trips the mechanism, allowing the contacts to spring open. Even though the Protectit handle is held in "On" position, the contacts will trip on overload.

Individual Arcing Chambers: Each double break contact operates in its own arcing chamber. This confines each arc and insures rapid and positive extinction.

Bimetallic Overload Element: This type of overload protection, a time-tested mechanically simple device, is trouble-free and accurate. Each tripping element is individually calibrated at the factory to give consistent repeat performance.

Interchangeable Heaters: Overload relay heaters are mounted . . . with a single screw . . . from the front of the Protectit without removing the mechanism from the box.

Heater sizes range from .63 to 16.0 in small increments, permitting this manual starter to protect the widest possible range of small motor starters. Heater catalog numbers, indicate trip ampere ratings. These heaters will cause ultimate tripping of a Protectit when current equal to the heaters rating passes through the motor starter.



No. 402U2

Heater Selection

The selection of the proper heater size for any particular application should be governed by the starting and overload characteristics of the motor. Under normal conditions, a heater size of approximately 20 to 25 per cent greater than the full load current of the motor is recommended. This applies to standard 40° rise motors in an ambient of 20°-40° C. For 50° rise motors, a heater size no greater than 115% full load current is recommended.

Because of the considerable variance between full load motor currents of different make motors of the same size, especially fractional h.p., the data in the following heater table is approximate. For more accurate results, see heater selection procedure in the preceding paragraph.

1 Heater—One Switching Pole and Solid Neutral or Two Switching Poles

SINGLE PHASE, A.C.						DIRECT CURRENT				
		115 Volts		230 Volts			115 Volts		230 Volts	
H.P.	Speed R.P.M.	Full Load Amp.	Heater No.	Full Load Amp.	Heater No.	H.P.	Full Load Amp.	Heater No.	Full Load Amp.	Heater No.
	3600	2.2	P2.5	1.1	P1.26					
1/8	1800	2.7	P3.15	1.4	P1.6	1/8	1.4	P1.6	.7	P .8
	1200	3.4	P4.0	1.7	P2.0					
	3600	2.7	P3.15	1.4	P1.6					
1/6	1800	3.0	P3.55	1.5	P1.8	1/6	1.8	P2.0	.9	P1.0
	1200	3.8	P4.5	1.9	P2.25					
	3600	3.6	P4.5	1.8	P2.25					
1/4	1800	4.1	P5.0	2.1	P2.5	1/4	2.3	P2.8	1.2	P1.42
	1200	5.0	P5.6	2.5	P2.8					
	3600	4.3	P5.0	2.2	P2.5					
1/3	1800	5.0	P5.6	2.5	P2.8	.....	....	.....	....	.....
	1200	6.0	P7.1	3.0	P3.55					
	1800	7.1	P8.0	3.6	P4.5					
1/2	1200	8.1	P10.0	4.1	P5.0	1/2	4.5	P5.6	2.3	P2.8
	900	10.8	P12.6	5.4	P6.3					
	1800	10.0	P11.2	5.0	P5.6					
3/4	1200	12.2	P14.2	6.1	P7.1	3/4	6.5	P8.0	3.3	P4.0
	900	13.5	P16.0	6.8	P8.0					
	1800	12.5	P14.2	6.3	P7.1					
1	1200	14.5	P16.0	7.3	P9.0	.....	....	.....	....	.....

Dimensions: Sheet steel, surface mounted enclosure: Length $4\frac{1}{32}$", Width $2\frac{11}{32}$", Depth (including guard) $2\frac{13}{16}$".

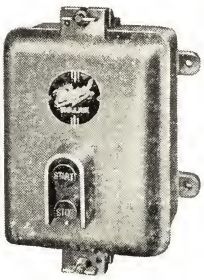
Information Required with Order: 1. CATALOG NUMBER. 2. HEATER RATING.

FEDERAL NOARK INDUSTRIAL CONTROLS

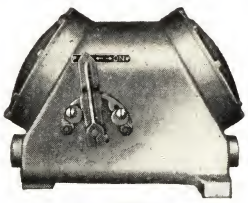
Bulletin 404—Manual A.C. Motor Starters



Type "A"
Sheet Steel



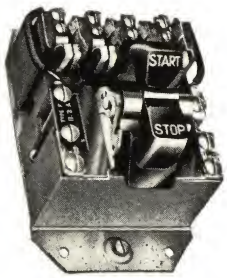
Type "D"
Weatherproof
Dust-tight



Type "E"
For Hazardous
Locations



Type "F"
Flush-Enclosed



Type "U"
Open

REPRESENTATIVE ENCLOSURE TYPES

Maximum Horsepower Ratings									
Volts	Single phase Motors 1 Phase	Poly-phase Motors 2 Phase 3 Phase	Size	Poles and Application	TYPE A NEMA Type I	TYPE D NEMA III, IV and V	TYPE E NEMA VII and IX	TYPE F NEMA Type IB	TYPE U Open
110	1	1½	0	2 Pole Single Ph.	*4A1* **$19.80**	*4D1* **$51.70**	*4E1* **$66.00**	*4F1* **$28.60**	*4U1* **$18.20**
220	1½	2		3 Pole 3 Phase 2 Ph. 3 W.	*4A2* **$22.00**	*4D2* **$53.90**	*4E2* **$68.00**	*4F2* **$30.80**	*4U2* **$20.40**
440-600	1½	2		4 Pole 2 Ph. 4 W.	*4A3* **$33.00**	*4D3* **$60.00**	*4E3* **$74.00**	*4F3* **$41.80**	*4U3* **$31.40**
110	1½	3	1	2 Pole Single Ph.	*4A4* **$25.30**	*4D4* **$64.00**	*4E4* **$78.00**	*4F4* **$34.10**	*4U4* **$23.10**
220	3	5		3 Pole 3 Phase 2 Ph. 3 W.	*4A5* **$27.50**	*4D5* **$66.00**	*4E5* **$80.00**	*4F5* **$36.30**	*4U5* **$25.30**
440-600	5	7½		4 Pole 2 Ph. 4 W.	*4A6* **$38.50**	*4D6* **$72.00**	*4E6* **$86.00**	*4F6* **$47.30**	*4U6* **$36.30**
115 V. 1 H.P., 230 V. 1 H.P.			0S	2 Pole D.C.	*4A7* **$19.80**	*4D7* **$51.70**	*4E7* **$66.00**	*4F7* **$28.60**	*4U7* **$18.20**
115 V. 1½ H.P., 230 V. 2 H.P.			1S	2 Pole D.C.	*4A8* **$25.30**	*4D8* **$64.00**	*4E8* **$78.00**	*4F8* **$34.10**	*4U8* **$23.10**

Type A—NEMA Type I—General Purpose, Sheet Steel Enclosure. Tight Fitting Rabbeted Cover. Knockouts, Four sides and back.

Type D—NEMA Types III, IV, V—Weatherproof, Watertight, Dusttight. Cast Enclosure with Live Rubber Gaskets. Threaded for ½ and ¾ Conduit, Top and Bottom.

Type E—NEMA Types VII, IX—Explosion Resisting for Class I, Group D and Class II, Group G for Hazardous Locations. Cast Enclosure, Screw Covers. Threaded for ¾ Conduit, Top and Bottom.

Type F—NEMA Type IB—Flush Mounting from Front, in Sheet Steel Enclosure (For Flush Yoke Mountings, see "Modifications"). Knockouts in Four Sides and Back.

Type U—Starter Alone Without Any Enclosure.

INFORMATION REQUIRED WITH ORDER

1 **CATALOG NUMBER**
Printed in italics above price

OR, ORDER BY
BULLETIN
SIZE
TYPE
POLES

This method of designation is preferable if any modification is desired.

FOR MODIFICATIONS AND OPTIONAL FEATURES SEE GENERAL CATALOG

2 **RELAY HEATERS**
Type F and trip ampere rating from table on the right.

Select heaters approximately 25% for AC and 20% for DC above motor name plate current.

Heaters are included in starter prices — one for single phase and two for polyphase. Heaters may be omitted or supplied at **$1.70** each list.

OVERLOAD HEATERS TYPE F

Trip Amperes		
.63	2.8	12.6
.71	3.15	14.2
.8	3.55	16.0
.9	4.0	18.0
1.0	4.5	20.0
1.12	5.0	22.5
1.26	5.6	25.0
1.42	6.3	28.0
1.6	7.1	
1.8	8.0	
2.0	9.0	
2.25	10.0	
2.5	11.2	

If overload protection is desired in both wires on a single phase circuit, a 3-pole starter should be specified.

Special finish can be supplied on order. The Type "A" enclosure will be supplied in a heavy cadmium plate instead of standard machine grey at an addition to list, of **$2.75** for Size 0 and **$4.15** for Size 1.

FEDERAL NOARK INDUSTRIAL CONTROLS

Bulletin 502 A.C. Magnetic Contactors

WITH AUXILIARY HOLD-IN CONTACT FOR 3-WIRE CONTROL—600 V. A.C.

Bulletin 502 are listed with an additional contact for an interlock. They are wired for 3-wire common control, but a wire and jumper are quickly removed for operation from a separate voltage source. For 2-wire control the interlock is just disregarded.



Type A



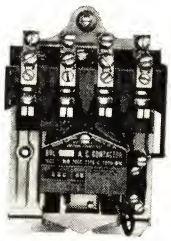
Type C



Type D



Type F†



Type U

Maximum H.P. Rating										
Volts	H.P. Single Phase	H.P. 2-Phase 3-Phase	Ampere Rating	Size	Poles	TYPE A NEMA I	TYPE C NEMA V	TYPE D NEMA III NEMA IV	TYPE E NEMA VII	TYPE U Open Type
110 220 440-600	1 1½ 1½	1½ 2 2	Open 15 Enclosed 13.5 Tungsten 8	0	2	*502A021* **$27.50**	Use Type D	*502D021* **$64.00**	Use Size 1	*502U021* **$24.80**
					3	*502A031* **$30.30**		*502D031* **$66.00**		*502U031* **$27.50**
					4	*502A041* **$38.50**		*502D041* **$74.00**		*502U041* **$35.80**
110 220 440-600	1½ 3 5	3 5 7½	Open 25 Enclosed 22.5 Tungsten 12	1	2	*502A121* **$33.00**	Use Type D	*502D121* **$68.00**	*502E121* **$134.00**	*502U121* **$30.30**
					3	*502A131* **$35.00**		*502D131* **$72.00**	*502E131* **$138.00**	*502U131* **$33.00**
					4	*502A141* **$44.00**		*502D141* **$80.00**	*502E141* **$146.00**	*502U141* **$41.30**
110 220 440-600	3 7½ 10	7½ 15 25	Open 50 Enclosed 45 Tungsten 30	2	2	*502A221* **$64.00**	*502C221* **$108.00**	*502D221* **$139.00**	*502E221* **$242.00**	*502U221* **$56.00**
					3	*502A231* **$68.00**	*502C231* **$112.00**	*502D231* **$144.00**	*502E231* **$248.00**	*502U231* **$60.00**
					4	*502A241* **$88.00**	*502C241* **$144.00**	*502D241* **$190.00**	—	*502U241* **$80.00**
110 220 440-600	7½ 15 25	15 30 50	Open 100 Enclosed 90 Tungsten 60	3	2	*502A321* **$110.00**	*502C321* **$162.00**	*502D321* **$212.00**	*502E321* **$344.00**	*502U321* **$90.00**
					3	*502A331* **$118.00**	*502C331* **$172.00**	*502D331* **$220.00**	*502E331* **$352.00**	*502U331* **$100.00**
					4	*502A341* **$146.00**	*502C341* **$228.00**	*502D341* **$278.00**	—	*502U341* **$128.00**
220 440-600	— —	50 100	Open 150 Enclosed 135 Tungsten 90	4	2	*502A421* **$264.00**	*502C421* **$350.00**	*502D421* **$438.00**	*502E421* *	*502U421* **$222.00**
					3	*502A431* **$282.00**	*502C431* **$366.00**	*502D431* **$454.00**	*502E431* *	*502U431* **$240.00**
					4	*502A441* **$376.00**	*502C441* **$492.00**	*502D441* **$622.00**	*502E441* *	*502U441* **$336.00**
220 440-600	— —	100 200	Open 300 Enclosed 270 Tungsten 180	5	2	*502A521* **$480.00**	*502C521* **$680.00**	*502D521* **$680.00**	*502E521* *	*502U521* **$410.00**
					3	*502A531* **$518.00**	*502C531* **$718.00**	*502D531* **$718.00**	*502E531* *	*502U531* **$448.00**
					4	*502A541* **$690.00**	*502C541* **$892.00**	*502D541* **$982.00**	*502E541* *	*502U541* **$622.00**

Type A—NEMA I—General Purpose, Sheet Steel Enclosure.
Type C—NEMA V—Dust-tight Sheet Steel Enclosure for Non-hazardous Locations.
Type D—NEMA III and IV—Weatherproof, Watertight Cast Iron Enclosure.
Type E—NEMA VII—Explosion-resisting Cast Enclosure for Class 1, Group D Hazardous Locations.
Type U—Open Type—Starter without any enclosure.
***Prices on explosion resisting enclosures on request.**
Prices of flush enclosures on request.

STANDARD AND HEAVY DUTY PUSH BUTTON STATIONS ARE LISTED ON A FOLLOWING PAGE.

OPTIONAL FEATURES

	SIZE 0 and 1	2	3
Changing N.O. auxiliary contact to N.C.	**$3.00**	**$3.00**	**$3.00**
Adding extra auxiliary contact, either N.O. or N.C.	***5.00**	**5.00**	**5.00**
Form 4, 3-wire thermostat control	**2.50**	**23.00**	**23.00**
Top terminal block instead of side on Type U only	No Charge		
Dual voltage coil 110/220 volts	**3.00**	**4.00**	**5.00**
Dual voltage coil 220/440 volts	**3.00**	**4.00**	**5.00**

***Not available on 4-Pole size 0 and 1.**

INFORMATION REQUIRED WITH ORDER

CATALOG NUMBER, OR
1. BULLETIN NUMBER.
2. SIZE.
3. NUMBER OF POLES.
4. TYPE. (If not specified Type "A" will be furnished.)
5. VOLTAGE } Of coil circuit
6. FREQUENCY }
7. OPTIONAL FEATURES, including Form if other than 1.

These may be ordered by specifying the Catalog Number printed in italics above the price. Voltage and frequency must be specified. The most common combinations of voltage and frequency must be indicated by adding to the Catalog Number the proper suffix from the table below.

Volts	CYCLES 60	50	40	30	25
110	—01	—02	—03	—04	—05
208/220	—06	—07	—08	—09	—10
440	—11	—12	—13	—14	—15
550	—16	—17	—18	—19	—20
600	—21	—22	—23	—24	—25

Standard coil ratings are 6, 12, 24, 110, 208/220, 440, 550 600 Volts; 25, 30, 40, 50 and 60 cycles. Others can be supplied.

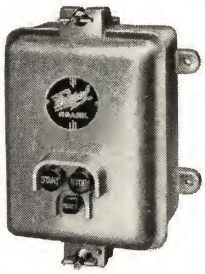
FEDERAL NOARK INDUSTRIAL CONTROLS

Bulletin 504-S Magnetic Motor Starters

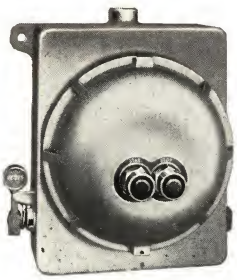
For Single Phase A.C. and Small D.C. Motors



Type A



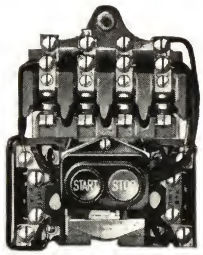
Type D



Type E



Type F



Type U

General Appearance of Enclosure Types (Differing Somewhat With Size)

2-POLE

Maximum Horsepower Ratings		‡Maximum Current Ratings	NEMA Size Number	†Form	TYPE A NEMA I	TYPE D NEMA III, IV and V	TYPE E NEMA VII	TYPE F NEMA IB	TYPE U
Volts	Single Phase A.C.	Amps			General Purpose		Explosion Resisting	Flush Mounting	Open Type
115 230 (440-600)*	1 1½ (1½)*	Open 15 Encl. 13.5	0	1	*5A91* **$33.00**	*5D91* **$68.00**	Use Size 1	*5F91* **$38.50**	*5U91* **$30.30**
				2	*5A92* **$38.50**	*5D92* **$87.80**		*5F92* **$44.00**	*5U92* **$35.80**
				3	*5A93* **$38.50**	*5D93* **$87.80**		*5F93* **$44.00**	*5U93* **$35.80**
115 230 (440-600)*	1½ 3 (5)*	Open 25 Encl. 22.5	1	1	*5A94* **$38.50**	*5D94* **$74.00**	*5E94* **$138.00**	*5F94* **$44.00**	*5U94* **$35.80**
				2	*5A95* **$44.00**	*5D95* **$93.80**	*5E95* **$168.80**	*5F95* **$49.50**	*5U95* **$41.30**
				3	*5A96* **$44.00**	*5D96* **$93.80**	—	*5F96* **$49.50**	*5U96* **$41.30**
115 230 (440-600)*	3 5 (7½)*	Open 33 Encl. 30	1P	1	*5A97* **$49.50**	*5D97* **$88.00**	*5E97* **$152.00**	*5F97* **$56.00**	*5U97* **$46.80**
				2	*5A98* **$55.00**	*5A98* **$107.80**	*5E98* **$182.80**	*5F98* **$62.00**	*5U98* **$52.30**
				3	*5A99* **$55.00**	*5D99* **107$.80**	—	*5F99* **$62.00**	*5U99* **$52.30**
Direct Current 115 V. 1½ H.P. 230 V. 2 H.P.		Open 25 Encl. 22.5	1S	1A 3-W. Control	*5A1A* **$56.00**	*5D1A* **$94.00**	*5E1A* **$156.00**	*5F1A* **$62.00**	*5U1A* **$52.30**
				1B 2-W. Control	*5A1B* **$56.00**	*5D1B* **$94.00**	*5E1B* **$156.00**	*5F1B* **$62.00**	*5U1B* **$52.30**
				2	*5A2* **$60.00**	*5D2* **$113.80**	*5E2* **$186.80**	*5F2* **$66.00**	*5U2* **$57.80**
				3B	*5A3B* **$60.00**	*5D3B* **$113.80**	—	*5F3B* **$66.00**	*5U3B* **$57.80**

†FORM 1—Remote Control no push button included. **FORM 2**—Local Control, Start and Stop Buttons in Cover. **FORM 3**—"Automatic-Off-Hand" 3 Position Switch in Cover.

Type A—NEMA Type 1—General Purpose, Sheet Steel Enclosure. Knockouts four sides and back.

Type D—NEMA III, IV and V—Weatherproof, Watertight and Dust-tight for Non-hazardous locations. Cast Enclosure. Threaded for Conduit.

Type E—NEMA VII—Explosion-Resisting. Cast Enclosure for Class I, Group D, Hazardous Locations. Threaded for Conduit.

Type F—NEMA IB—Flush Mounting, Sheet Steel Enclosure. Knockouts.

Type U—Open Type—Starter without any Enclosure.

‡For all Voltages and all Forms Open Type and all Enclosed Types.

Catalog numbers appear in italics above the list price.

Overload protection on all the above starters is provided by one Bulletin 925 Thermal Relay Type F-1. Price includes one Type F Heater. Additional heaters **$1.70** each list.

Two overload relays cannot be supplied with a double voltage coil. For two relays with a single voltage coil order a Bulletin 504 3-pole starter, Size 0 to 1 see following page; or 504 Size 1P at at increased list of **$4.50.**

INFORMATION REQUIRED WITH ORDER

1. CATALOG NUMBER

Printed in italics above price.

OR, order by

BULLETIN
SIZE
TYPE
POLES
FORM
HORSEPOWER
A.C. OR D.C.

} Preferable if any modification is desired

For Modifications and Optional Features, information on request.

2. VOLTS AND CYCLES

Or add suffix from the table below to the catalog number.

Volts/Cycles	60	50	40	30	25
115/230	—26	—27	—28	—29	—30
115 V. D. C.	—46		230 V. D.C.		—47

*Note. Standard single phase A.C. starters have a dual voltage coil with changeable links for 115 or 230 volts. H.P. ratings at higher voltages are therefore based on separate control, or the use of other coils which are available.

3. RELAY HEATERS

Type F and trip ampere rating from the table below. (Select heaters approximately 25% above motor nameplate current. For details see following page.)

.63	1.6	4.0	10.0	**25.0**
.71	1.8	4.5	11.2	**28.0**
.8	2.0	5.0	12.6	**31.5**
.9	2.25	5.6	14.2	**35.5**
1.0	2.5	6.3	16.0	
1.12	2.8	7.1	18.0	
1.26	3.15	8.0	20.0	
1.42	3.55	9.0	22.5	

Heaters may be omitted or extra heaters supplied at **$1.70** each, list.

FEDERAL NOARK INDUSTRIAL CONTROLS

Bulletin 504 Magnetic A.C. Motor Starters

Across-the-Line Type for Polyphase

See General Illustrations of Types on Preceding Page

3-POLE

Maximum Horsepower Rating			NEMA							
Volts	Single Phase	3-Phase 2-Phase 3-Wire	Size Number and 2-Hour Open Contactor Rating	†Form	TYPE A NEMA I	TYPE C NEMA V	TYPE D NEMA III NEMA IV	TYPE E NEMA VII	TYPE F NEMA IB	TYPE U Open Type
110 220 440-600	1 1½ 1½	1½ 2 2	Size 0 15 Amps.	1	*5A031* **$38.50**	Use Type D	*5D031* **$74.00**	Use Size 1	*5F031* **$44.00**	*5U031* **$35.80**
				2	*5A032* **$44.00**		*5D032* **$93.80**		*5F032* **$49.50**	*5U032* **$41.30**
				3	*5A033* **$44.00**		*5D033* **$93.80**		*5F033* **$49.50**	*5U033* **$41.30**
110 220 440-600	1½ 3 5	3 5 7½	Size 1 25 Amps.	1	*5A131* **$44.00**	Use Type D	*5D131* **$80.00**	*5E131* **$146.00**	*5F131* **$49.50**	*5U131* **$41.30**
				2	*5A132* **$49.50**		*5D132* **$99.80**	*5E132* **$176.80**	*5F132* **$55.00**	*5U132* **$46.80**
				3	*5A133* **$49.50**		*5D133* **$99.80**	—	*5F133* **$55.00**	*5U133* **$46.80**
110 220 440-600	3 7½ 10	7½ 15 25	Size 2 50 Amps.	1	*5A231* **$84.00**	*5C231* **$128.00**	*5D231* **$156.00**	*5E231* **$262.00**	*5F231* **$94.00**	*5U231* **$74.00**
				2	*5A232* **$95.00**	*5C232* **$150.00**	*5D232* **$178.00**	*5E232* **$295.00**	*5F232* **$105.00**	*5U232* **$85.00**
				3	*5A233* **$95.00**	*5C233* **$150.00**	*5D233* **$178.00**	—	*5F233* **$105.00**	*5U233* **$85.00**
110 220 440-600	7½ 15 25	15 30 50	Size 3 100 Amps.	1	*5A331* **$138.00**	*5C331* **$190.00**	*5D331* **$240.00**	—	—	*5U331* **$118.00**
				2	*5A332* **$154.50**	*5C332* **$212.00**	*5D332* **$262.00**	—	—	*5U332* **$134.50**
				3	*5A333* **$154.50**	*5C333* **$212.00**	*5D333* **$262.00**	—	—	*5U333* **$134.50**
220 440-600	— —	50 100	Size 4 150 Amps.	1	*5A431* **$308.00**	*5C431* **$394.00**	*5D431* **$482.00**	*	—	*5U431* **$266.00**
				2	*5A432* **$324.50**	—	—	—	—	—
				3	*5A433* **$324.50**	—	—	—	—	—
220 440-600	— —	100 200	Size 5 300 Amps.	1	*5A531* **$622.00**	*5C531* **$822.00**	*5D531* **$822.00**	*	—	*5U531* **$552.00**
				2	*5A532* **$655.00**	—	—	—	—	—
				3	*5A533* **$655.00**	—	—	—	—	—

†FORM 1—Remote Control, No Push Button Included. **FORM 2**—Local Control. Start and Stop Buttons in Cover. **FORM 3**—"Automatic-Off-Hand" 3-Position in Cover.

Type A—NEMA Type I—General Purpose. Sheet Steel Enclosure. Knockouts four sides and back.

Type C—NEMA V—Dust-tight. Sheet Steel Enclosure for Non-hazardous Locations. Knockouts four sides and back.

Type D—NEMA III and IV—Weatherproof, Watertight. Cast Iron Enclosure, Threaded for Conduit.

Type E—NEMA VII—Explosion-resisting. Cast Enclosure for Class I, Group D, Hazardous Locations.

Type F—NEMA IB—Flush Mounting. Sheet Steel Enclosure. Knockouts.

Type U—Open Type. Starter Without Any Enclosure.

***Prices on explosion resisting enclosures on request.**

Catalog numbers appear in italics above the list price.

STANDARD AND HEAVY DUTY PUSH BUTTON STATIONS ARE LISTED ON ANOTHER PAGE.

Overload protection on all of the above starters is provided by two Bulletin 925 thermal overload relays. Price includes two heaters, Type F, to be packed from list. Additional relay heaters **$3.40** per pair.

APPLICATION

3 POLE STARTER FOR
- 3 Phase
- 2 Phase 3 Wire
- 1 Phase above 220 V. or with 2 Overload Relays

4 POLE STARTER FOR
- 2 Phase 4 Wire. See another page.

SINGLE PHASE STARTER FOR
- 200 V. or less see another page.

INFORMATION REQUIRED WITH ORDER

Voltage and frequency must be specified—if standard this may be done by adding to the catalog number the proper suffix from the table below.

	CYCLES				
Volts	60	50	40	30	25
110	—01	—02	—03	—04	—05
208/220	—06	—07	—08	—09	—10
440	—11	—12	—13	—14	—15
550	—16	—17	—18	—19	—20
600	—21	—22	—23	—24	—25

The above combinations are standard. Others can be supplied.

1. **CATALOG NUMBER,** OR
   BULLETIN
   SIZE
   TYPE
   POLES
   FORM
   HORSEPOWER
2. **VOLTS AND CYCLES**
   or add proper suffix to catalog number
3. **RELAY HEATERS**
   See another page for full information on selecting relay heaters.

FEDERAL NOARK INDUSTRIAL CONTROLS

Bulletin 504 Magnetic A.C. Motor Starters

Across-the-Line Polyphase

See General Illustrations of Types on a Preceding Page

4-POLE

Maximum Horsepower Rating		NEMA Size Number and 8-Hour Open Contactor Rating	†Form	TYPE A NEMA I	TYPE C NEMA V	TYPE D NEMA III NEMA IV	TYPE E NEMA VII	TYPE F NEMA IB	TYPE U Open Type
Volts	2-Phase 4-Wire								
110 220 440-600	1½ 2 2	Size 0 15 Amps.	1	*5A041* **$46.80**	Use Type D	*5D041* **$86.00**	Use Size 1	*5F041* **$52.30**	*5U041* **$44.00**
			2	*5A042* **$52.30**		*5D042* **$105.80**		*5F042* **$57.80**	*5U042* **$49.50**
			3	*5A043* **$52.30**		*5D043* **$105.80**		*5F043* **$57.80**	*5U043* **$49.50**
110 220 440-600	3 5 7½	Size 1 25 Amps.	1	*5A141* **$52.30**	Use Type D	*5D141* **$90.00**	*5E141* **$154.00**	*5F141* **$58.00**	*5U141* **$49.50**
			2	*5A142* **$57.80**		*5D142* **$109.80**	*5E142* **$184.80**	*5F142* **$63.50**	*5U142* **$55.00**
			3	*5A143* **$57.80**		*5D143* **$109.80**	—	*5F143* **$63.50**	*5U143* **$55.00**
110 220 440-600	7½ 15 25	Size 2 50 Amps.	1	*5A241* **$100.00**	*5C241* **$156.00**	*5D241* **$204.00**	—	*5F241* **$110.00**	*5U241* **$90.00**
			2	*5A242* **$111.00**	*5C242* **$178.00**	*5D242* **$226.00**	—	*5F242* **$121.00**	*5U242* **$101.00**
			3	*5A243* **$111.00**	*5C243* **$178.00**	*5D243* **$226.00**	—	*5F243* **$121.00**	*5U243* **$101.00**
110 220 440-600	15 30 50	Size 3 100 Amps.	1	*5A341* **$168.00**	*5C341* **$248.00**	*5D341* **$298.00**	—	—	*5U341* **$150.00**
			2	*5A342* **$184.50**	*5C342* **$270.00**	*5D342* **$320.00**	—	—	*5U342* **$166.50**
			3	*5A343* **$184.50**	*5C343* **$270.00**	*5D343* **$320.00**	—	—	*5U343* **$166.50**
220 440-600	50 100	Size 4 150 Amps.	1	*5A441* **$404.00**	*5C441* **$520.00**	*5D441* **$650.00**	—	—	*5U441* **$364.00**
			2	*5A442* **$420.50**	—	—	—	—	—
			3	*5A443* **$420.50**	—	—	—	—	—
220 440-600	100 200	Size 5 300 Amps.	1	*5A541* **$794.00**	*5C541* **$1010.00**	*5D541* **$1086.00**	—	—	*5U541* **$726.00**
			2	*5A542* **$827.00**	—	—	—	—	—
			3	*5A543* **$827.00**	—	—	—	—	—

†FORM 1—Remote Control—No Push Button Included. **FORM** 2—Local Control, Start and Stop Buttons in Cover. **FORM 3**—"Automatic-off-Hand" 3-Position Switch in Cover. General Purpose.

Type A—NEMA I—Sheet Steel Enclosure. Knockouts, four sides and back.

Type C—NEMA V—Dust-tight. Sheet Steel Enclosure for Non-hazardous Locations. Knockouts, four sides and back.

Type D—NEMA III and IV—Waterproof and Watertight. Cast Iron Enclosure, Threaded for Conduit.

Type E—NEMA VII—Explosion-resisting. Cast Enclosure for Class I, Group D, Hazardous Locations. Threaded for Conduit.

Type F—NEMA IB—Flush Mounting. Sheet Steel Enclosure. Knockouts.

Type U—Open Type—Starter without Any Enclosure.

Catalog numbers appear in italics above the list price.

STANDARD AND HEAVY DUTY PUSH BUTTON STATIONS ARE LISTED ON ANOTHER PAGE.

Overload protection on all of the above starters is provided by two Bulletin 925 thermal overload relays. Price includes two heaters, Type F, to be packed from list. Additional relay heaters **$3.40** per pair.

APPLICATION

4 POLE STARTER FOR
2 Phase 4 Wire

3 POLE STARTER FOR
3 Phase
2 Phase 3 Wire } See another page

FOR SINGLE PHASE
220 V. or less see Single Phase Bulletin 504 on another page.

INFORMATION REQUIRED WITH ORDER

Voltage and frequency must be specified — if standard this may be done by adding to the catalog number the proper suffix from the table below.

	CYCLES				
Volts	**60**	**50**	**40**	**30**	**25**
100	—01	—02	—03	—04	—05
208/220	—06	—07	—08	—09	—10
440	—11	—12	—13	—14	—15
550	—16	—17	—18	—19	—20
600	—21	—22	—23	—24	—25

The above combinations are standard. Others can be supplied.

1. **CATALOG NUMBER,** OR
   BULLETIN
   SIZE
   TYPE
   POLES
   FORM
   HORSEPOWER
2. **VOLTS AND CYCLES**
   or add proper suffix to catalog number
3. **RELAY HEATERS**

FEDERAL NOARK INDUSTRIAL CONTROL

Bulletin 504 Magnetic A.C. Motor Starters (Continued)

MODIFICATIONS, OPTIONAL AND ADDITIONAL FEATURES

(Available on all enclosure types except when otherwise shown)

	LIST PRICE ADDITIONS					
	Size 0 and 1	Size 2	Size 3	Size 4	Size 5	Size 6
Changing auxiliary contact from normally open to normally closed	$ 6.60	$ 6.60	$ 6.60	$13.20	$17.60	$17.60
Adding an extra auxiliary contact, normally open or normally closed	11.00	11.00	11.00	22.00	30.80	30.80
Adding a 3 wire thermostat relay, or similar type of control circuit relay (Types A, C, D, U enclosures)	50.60	50.60	50.60	80.00	80.00	80.00
Form 4, 3 wire thermostat control for Bulletin 502 only	50.60	50.60	50.60	80.00	80.00	80.00
Top terminal block instead of side on type U Bulletin 502 only	No Charge	No Charge	No Charge			
Zinc plated enclosure (no charge on Type D enclosure)	8.30	13.80	33.00	44.00	58.00	58.00
Control circuit transformer fused on low voltage side*						
60 cycles, enclosure Type A, C, U	26.40	37.40	56.00	68.00	68.00	34.00
60 cycles, enclosure Type D	56.00	68.00	84.00	.....	.....	.....
25 cycles, enclosure Types A, C, U	44.00	56.00	68.00	84.00	84.00	84.00
25 cycles, enclosure Type D	74.00	84.00	96.00	.....	.....	.....
Dual voltage coils						
220/440 volts on single phase starters	6.60	.....	.....	.....	.....	.....
115/230 or 220/440 volts on contactors and polyphase starters	6.60	8.80	11.00	.....	.....	.....
Additional Bulletin 925 overload relays (Type A, U enclosures)						
Single relay in third leg of a 3 phase circuit	20.00	27.50	33.00	40.00	70.00	70.00
2 relays for 2 motors or a 2 speed motor	33.00	49.50	49.50	.....	.....	.....
4 relays for 3 motors or a 3 speed motor	66.00	90.00	120.00	.....	.....	.....
6 relays for 4 motors or a 4 speed motor	100.00	130.00	182.00	.....	.....	.....
Special nameplate or number tag attached to device	5.50	5.50	5.50	5.50	5.50	5.50
NEMA II drip-proof hoods on Type A enclosures	22.00	39.60	74.00	128.00	.....	.....
Flush mounting yokes, for mounting Type U starters from the rear, no flush plate required	2.80	8.30	.....	.....	.....	.....
Catalog number for Form 1 Bulletin 502 Contactors Size 0 and 1, No. 30121; Size No. 30125						
Catalog number for Form 1 Bulletin 504 Starter Size 0 and 1, No. 30109; Size 2 No. 30113						
Catalog number for Form 2 or 3 Bulletin 502 Contactors Size 0 and 1, No. 30122; Size 2 No. 30126						
Catalog number for Form 2 or 3 Bulletin 504 Starter Size 0 and 1, No. 30110; Size 2, No. 30114						
Flush mounting yokes complete with flush plate for mounting Type U starters from the front	5.80	11.00	.....	.....	.....	.....
Catalog number for Form 1 Bulletin 502 Contactors Size 0 and 1, No. 30123; Size 2, No. 30127						
Catalog number for Form 1 Bulletin 504 Starter Size 0 and 1, No. 30111; Size 2, No. 30115						
Catalog number for Form 2 or 3 Bulletin Contactors Size 0 and 1, No. 30124; No. 2, No. 30128						
Catalog number for Form 2 or 3 Bulletin 504 Starter Size 0 and 1, No. 30112; Size 2, No. 30116						

*No deduction for unfused transformers. †Not available on 4 pole size 0 and 1, Bulletin 502 and 504.

ORDERING INFORMATION

Since most of the optional features and combinations thereof cannot be covered by the standard catalog numbers, special number (usually a "Modification Number") will be assigned at factory. Thus your identification, or receiving department recognition, of a device with special features, will usually be facilitated by ordering it by complete description including modification, rather than by catalog number.

PUSH BUTTON STATIONS

Standard duty push button stations are available for 1, 2 and 3 buttons—and are approved for use with magnetic starters up to and including Size 4.

Heavy duty push button stations are available for 1 to 8 buttons and are approved for use with all sizes of magnetic starters.

SELECTION OF OVERLOAD RELAY HEATERS

If the heater is too large it will not protect the motor. If the heater is to small it will trip the starter unnecessarily. A wide range of heaters is provided, in small increments, to permit the selection of the correct rating for each motor.

Tables which give average values of current for various horsepower and voltage combinations should not be used for the selection of heaters because different types and makes of motors vary widely, especially below 1 H.P. If the heater is selected on the basis of motor current obtained from other than the motor nameplate, it should be checked with the nameplate when installing.

Multiply the full load motor current (from motor nameplate) by the desired factor for overcurrent protection and select the nearest rating from the list on the price sheet. For normal operation of standard 40° rise A.C. motors in an ambient of approximately 25° C (77°F) we recommend 1.15 or less. For D.C. motors the factor should generally not exceed 1.20.

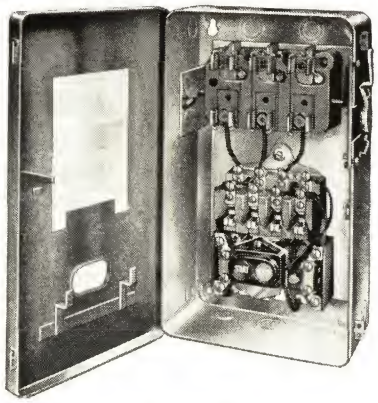
FEDERAL NOARK INDUSTRIAL CONTROLS

Bulletin 514 Combination Motor Starters

(Non-Reversing)

WITH MOTOR CIRCUIT DISCONNECT SWITCH

The 8-hour normal service ratings are based on the magnetic starter. Fuse clips or breaker should be selected for the actual horsepower rating of the motors to be controlled in accordance with the National Electrical Code.



Bulletin 514

THERMAL OVERLOAD PROTECTION**

3 POLES

Horsepower Ratings				BASIC CATALOG NUMBER For Type A Enclosure (For Type C or D Enclosures change letter A in Catalog Number to appropriate letter)			TYPE A NEMA Type I General Purpose Sheet Steel Enclosure Hinged Cover Knockouts Four Sides and Back		TYPE C NEMA Type V Dusttight (For non-hazardous dust locations) Sheet Steel Enclosure with Bolted Cover and Felt Gaskets Knockouts		TYPE D NEMA Types III, IV Weatherproof Watertight Cast Enclosure with Live Rubber Gaskets Threaded for Conduit	
Starter Size	Maximum Volts	Fuse Clip Size	†Style Letter	FORM 1 Remote Control No Push Button Included	FORM 2 Local Control Start & Stop Button in Cover	FORM 3 Automatic Off-Hand 3-Position Switch in Cover	FORM 1	FORM 2-3	FORM 1	FORM 2-3	FORM 1	FORM 2-3
0	250	Unfused	A	514A031A	514A032A	514A033A	$ 74.00	$ 79.50	$114.00	$133.80	$172.00	$191.80
		30A	B	514A031B	514A032B	514A033B	86.00	91.50	126.00	145.80	182.00	201.80
	600	Unfused	P	514A031P	514A032P	514A033P	74.00	79.50	114.00	133.80	172.00	191.80
		30A	Q	514A031Q	514A032Q	514A033Q	94.00	99.50	134.00	153.80	192.00	211.80
1	250	Unfused	A	514A131A	514A132A	514A133A	80.00	85.50	118.00	137.80	176.00	195.80
		30A	B	514A131B	514A132B	514A133B	90.00	95.50	130.00	149.80	188.00	207.80
		60A	C	514A131C	514A132C	514A133C	96.00	101.50	136.00	155.80	194.00	213.80
	600	Unfused	P	514A131P	514A132P	514A133P	80.00	85.50	118.00	137.80	176.00	195.80
		30A	Q	514A131Q	514A132Q	514A133Q	100.00	105.50	138.00	157.80	196.00	215.80
		60A	R	514A131R	514A132R	514A133R	100.00	105.50	138.00	157.80	196.00	215.80
2	250	Unfused	P*	514A231P	514A232P	514A233P	138.00	149.00	190.00	212.00	288.00	310.00
		60A	C	514A231C	514A232C	514A233C	154.00	165.00	204.00	226.00	304.00	326.00
		100A	D	514A231D	514A232D	514A233D	162.00	173.00	214.00	236.00	312.00	334.00
		200A	E	514A231E	514A232E	514A233E	196.00	207.00	246.00	268.00	346.00	368.00
	600	Unfused	P*	514A231P	514A232P	514A233P	138.00	149.00	190.00	212.00	288.00	310.00
		30A	Q	514A231Q	514A232Q	514A233Q	162.00	173.00	214.00	236.00	312.00	334.00
		60A	R	514A231R	514A232R	514A233R	162.00	173.00	214.00	236.00	312.00	334.00
		100A	S	514A231S	514A232S	514A233S	174.00	185.00	224.00	246.00	324.00	346.00
3	250	Unfused	P*	514A331P	514A332P	514A333P	222.00	238.50	288.00	310.00	482.00	504.00
		100A	D	514A331D	514A332D	514A333D	238.00	254.00	304.00	326.00	498.00	520.00
		200A	E	514A331E	514A332E	514A333E	262.00	278.50	328.00	350.00	522.00	544.00
	600	400A	F	514A331F	514A332F	514A333F	376.00	392.50	442.00	464.00	636.00	658.00
		Unfused	P*	514A331P	514A332P	514A333P	222.00	238.50	288.00	310.00	482.00	504.00
		100A	S	514A331S	514A332S	514A333S	248.00	264.50	314.00	336.00	508.00	530.00
		200A	T	514A331T	514A332T	514A333T	288.00	304.50	354.00	376.00	548.00	570.00
4	250	Unfused	P*	514A431P	514A432P	514A433P	452.00	468.50	658.00	680.00	—	—
		400	F	514A431F	514A432F	514A433F	580.00	596.50	788.00	810.00	—	—
	600	Unfused	P*	514A431P	514A432P	514A433P	452.00	468.50	658.00	680.00	—	—
		200	T	514A431T	514A432T	514A433T	502.00	518.50	708.00	730.00	—	—
		400	U	514A431U	514A432U	514A433U	624.00	640.50	832.00	854.00	—	—
5	250	Unfused	P*	514A531P	514A532P	514A533P	958.00	991.00	—	—	—	—
		600	G	514A531G	514A532G	514A533G	1118.00	1151.00	—	—	—	—
	600	Unfused	P*	514A531P	514A532P	514A533P	958.00	991.00	—	—	—	—
		400	U	514A531U	514A532U	514A533U	1034.00	1067.00	—	—	—	—
		600	V	514A531V	514A532V	514A533V	1170.00	1203.00	—	—	—	—

*Style P, 600 volts unfused, is supplied for all voltages.

**Overload relays may be omitted. See Modifications.

†For information required with order, see Modifications.

FEDERAL NOARK INDUSTRIAL CONTROLS

Bulletin 515 Combination Motor Starters

(Non-Reversing)

WITH AIR CIRCUIT BREAKER

FORM 1—REMOTE CONTROL 3 POLE ONLY THERMAL OVERLOAD PROTECTION*

Forms 2 and 3 Available.
See Modification Table below.



Bulletin 515 Type A (Closed)

Horsepower Ratings				TYPE A NEMA Type I General Purpose Sheet Steel Enclosure Hinged Cover Knockouts Four Sides and Back	TYPE C NEMA Type V Dusttight (Non-hazardous locations) Sheet Steel Enclosure with Bolted Cover, Felt Gaskets Knockouts	TYPE D NEMA Types III, IV Weatherproof Watertight Cast Iron Enclosure with Live Rubber Gaskets Threaded for Conduit
Starter Size	Maximum Volts	Ampere Rating Circuit Breaker	Style Number (For use in ordering)			
0	250	15	250- 15	$100.00	$138.00	$196.00
	600	15	600- 15	118.00	158.00	216.00
1	250	15	250- 15	106.00	146.00	202.00
		20	250- 20	106.00	146.00	202.00
		30	250- 30	106.00	146.00	202.00
		40	250- 40	106.00	146.00	202.00
	600	15	600- 15	126.00	166.00	222.00
		20	600- 20	126.00	166.00	222.00
		25	600- 25	126.00	166.00	222.00
2	250	40	250- 40	162.00	214.00	312.00
		50	250- 50	162.00	214.00	312.00
		70	250- 70	200.00	250.00	350.00
		100	250-100	200.00	250.00	350.00
	600	20	600- 20	194.00	244.00	344.00
		30	600- 30	194.00	244.00	344.00
		50	600- 50	194.00	244.00	344.00
		70	600- 70	232.00	282.00	380.00
3	250	100	250-100	276.00	342.00	534.00
		125	250-125	430.00	496.00	688.00
	600	70	600- 70	304.00	370.00	564.00
		100	600-100	304.00	370.00	564.00

Sizes 4 and 5 are available. Refer to nearest district office or factory.
Standard and Heavy Duty Pushbutton Stations are Listed on Another Page.

MODIFICATIONS, OPTIONAL AND ADDITIONAL FEATURES

BULLETIN 514 AND 515

(Available on all enclosure types, except when otherwise shown)

INFORMATION REQUIRED WITH ORDER

1. BULLETIN NUMBER
   TYPE
   SIZE
   POLES
   FORM
   STYLE
2. VOLTS AND CYCLES
3. HEATERS
   Type F and amperes from Heater Table.

	LIST PRICE ADDITIONS Size 0 & 1	Size 2	Size 3
Changing auxiliary contact from normally open to normally closed	$6.60	$6.60	$6.60
Adding an extra auxiliary contact, normally open or normally closed	11.00	11.00	11.00
Adding a 3-wire thermostat relay, or similar type of control circuit relay (Types A, C, D, U)	50.60	50.60	50.60
Zinc plated enclosure (no charge for Type D)	8.30	13.80	33.00
Special paint (no charge for 50 or more identical)	5.50	8.30	11.00
Control circuit transformer fused on low voltage side†			
60 cycles, enclosure Types A, C, U	26.40	37.40	56.00
60 cycles, enclosure Type D	56.00	68.00	84.00
25 cycles, enclosure Types A, C, U	44.00	56.00	68.00
25 cycles, enclosure Type D	74.00	84.00	96.00
Dual voltage coils on starter: 110/220 or 220/440 volts	6.60	8.80	11.00
Additional Bulletin 925 overload relay for protection in 3 wires	13.80	19.30	22.00
Special nameplate or number tag attached to device	5.50	5.50	5.50
Form 2: Start-Stop push buttons in cover } {Type A, B, U	5.50	11.00	16.50
Form 3: Auto-Off-Hand switch in cover } {Type C, D	19.80	22.00	22.00
Special enclosure:			
Type B—(NEMA 1A) semi-dust-tight	11.00	15.40	22.00
Driphood to make NEMA Type II	22.00	22.00	33.00
Type U—omission of enclosure on Bulletin 512, 514 deduct	4.40	11.00	19.80
*Starters without overload relays deduct	8.30	13.80	19.30

*Specify Bulletin 512 with motor circuit switch.
*Specify Bulletin 513 with air circuit breaker.

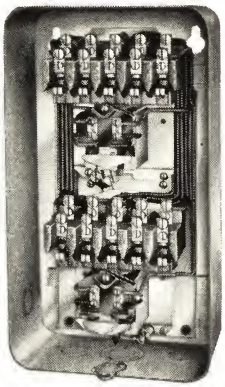
†No deduction for unfused transformers

FEDERAL NOARK INDUSTRIAL CONTROLS

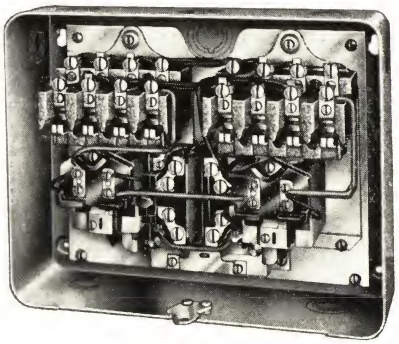
Reversing Contactors and Starters



Bulletin 522



Type A Vertical



Bulletin 524

FORM 1—REMOTE CONTROL
BULLETIN 522
Reversing Contactors—Without Overload Protection

Maximum Horsepower Ratings			Size Number of Starter	TYPE A NEMA Type I General Purpose Sheet Steel Enclosure			TYPE C NEMA Type V Dusttight (For non-hazardous locations) Sheet Steel Felt Gaskets Knockouts			TYPE D NEMA Types III and IV Weatherproof and Watertight Cast Iron Rubber Gaskets Threaded for Conduit			TYPE U Open Starter Alone Without Any Enclosure		
Volts	1 Phase	2 or 3 Phase		2 Pole	3 Pole	4 Pole	2 Pole	3 Pole	4 Pole	2 Pole	3 Pole	4 Pole	2 Pole	3 Pole	4 Pole
110 220 440-600	½ ¾ —	— 1 1	00	$58.00	$64.00	—	—	—	—	—	—	—	$56.00	$60.00	—
110 220 440-600	1 1½ 1½	1½ 2 2	0	68.00	74.00	$90.00	$100.00	$106.00	$122.00	$116.00	$122.00	$138.00	66.00	72.00	$88.00
110 220 440-600	1½ 3 5	3 5 7½	1	84.00	88.00	106.00	112.00	122.00	138.00	144.00	152.00	168.00	78.00	84.00	100.00
110 220 440-600	3 7½ 10	7½ 15 25	2	—	166.00	204.00	—	206.00	244.00	—	270.00	314.00	—	150.00	188.00
110 220 440-600	— — —	15 30 50	3	—	270.00	332.00	—	336.00	396.00	—	424.00	484.00	—	240.00	304.00
220 440-600	— —	50 100	4	—	694.00	882.00	—	794.00	988.00	—	966.00	1158.00	—	640.00	832.00
220 440-600	— —	100 200	5	—	1224.00	1570.00	—	1542.00	1890.00	—	1542.00	2088.00	—	948.00	1296.00
Direct Current	115V. 1 H.P. 230V. 1 H.P.		0	—	—	90.00	—	—	122.00	—	—	138.00	—	—	84.00
	115V. 1½ H.P. 230V. 2 H.P.		1	—	—	106.00	—	—	138.00	—	—	168.00	—	—	100.00

BULLETIN 524
Reversing Starters—With Thermal Overload Protection

110 220	½ ¾	1 1	00	$56.00	$72.00	—	—	—	—	—	—	—	$60.00	$68.00	—
110 220 440-600	1 1½ 1½	1½ 2 2	0	74.00	84.00	$100.00	$106.00	$112.00	$130.00	$122.00	$130.00	$146.00	72.00	80.00	$96.00
110 220 440-600	1½ 3 5	3 5 7½	1	88.00	96.00	112.00	122.00	130.00	146.00	152.00	160.00	176.00	84.00	90.00	108.00
110 220 440-600	3 7½ 10	7½ 15 25	2	—	184.00	222.00	—	226.00	264.00	—	288.00	332.00	—	168.00	206.00
110 220 440-600	— — —	— 30 50	3	—	288.00	352.00	—	354.00	416.00	—	442.00	504.00	—	2 0.00	322.00
220 440-600	— —	50 100	4	—	724.00	914.00	—	826.00	1018.00	—	996.00	1188.00	—	672.00	860.00
220 440-600	— —	100 200	5	—	1328.00	1674.00	—	1648.00	1994.00	—	1648.00	2192.00	—	1054.00	1400.00
Direct Current	115V. 1 H.P. 230V. 1 H.P.		0	—	—	100.00	—	—	130.00	—	—	146.00	—	—	94.00
	115V. 1½ H.P. 230V. 2 H.P.		1	—	—	112.00	—	—	146.00	—	—	176.00	—	—	106.00

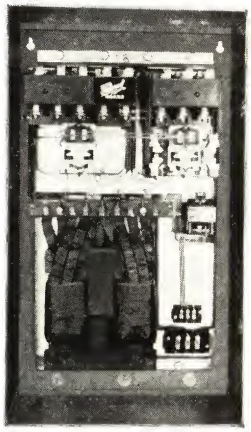
FEDERAL NOARK INDUSTRIAL CONTROLS

Bulletins 554, 555—Magnetic Compensator Starters

ADJUSTABLE PNEUMATIC TIMER—OVERLOAD PROTECTION—3 PHASE

TAPS FOR 50-65-80 PER CENT

General Purpose NEMA Type 1 Enclosure



Horsepower Rating	PRIMARY RESISTOR STARTERS 3 Phase Bulletin 554 — Non-Reversing				SECONDARY RESISTOR STARTERS 2 or 3 Phase Bulletin 555 — Reversing			
	50-60 Cycles		25-60 Cycles		50-60 Cycles		25-40 Cycles	
	220 V.	440 V. 550 V.	220 V.	440 V. 550 V.	220 V.	440 V. 550 V.	220 V.	440 V. 550 V.
5	$ 522.00	$ 522.00	$ 522.00	$ 522.00	$ 916.00	$ 916.00	$ 916.00	$ 916.00
7½	522.00	522.00	522.00	522.00	916.00	916.00	916.00	916.00
10	522.00	522.00	522.00	522.00	916.00	916.00	916.00	916.00
15	522.00	522.00	570.00	570.00	916.00	916.00	964.00	964.00
20	610.00	570.00	656.00	616.00	1026.00	916.00	1072.00	1010.00
25	610.00	570.00	656.00	616.00	1026.00	916.00	1072.00	1010.00
30	632.00	632.00	870.00	870.00	1048.00	1048.00	1284.00	1284.00
40	1296.00	684.00	1356.00	946.00	2200.00	1100.00	2258.00	1362.00
50	1296.00	684.00	1356.00	946.00	2200.00	1100.00	2258.00	1362.00
60	1980.00	1316.00	2042.00	1430.00	3058.00	2218.00	3120.00	2332.00
75	1980.00	1316.00	2042.00	1430.00	3058.00	2218.00	3120.00	2332.00
100	2178.00	1316.00	2178.00	1538.00	3256.00	2218.00	3256.00	2440.00
125	.....	2070.00	.....	2156.00	.....	3148.00	.....	3234.00
150	.....	2070.00	.....	2436.00	.....	3148.00	.....	3514.00
200	.....	2282.00	.....	2674.00	.....	3360.00	.....	3752.00

Bulletin 454—Manual Reduced Voltage Starter

*3 POLE—COMPENSATOR TYPE—2 AND 3 PHASE

With 50-60-80 Per Cent Taps



Maximum Horsepower Rating		List Price	
220 V.	440-550 V.	50-60 Cycles	25-40 Cycles
10	10	$310.00	$324.00
15	15	310.00	336.00
25	25	324.00	354.00
30	30	336.00	.....
.....	40	354.00	.....
.....	50	354.00	.....

OPTIONAL FEATURES	
Description	List Price
Ammeter on top of Enclosure	$198.00
Drip-proof Hood with Cadmium Plated Enclosure	92.00
Cadmium Plated Enclosure	43.00
Special Paint	15.40
Floor Mounting Angles	46.20

*For list prices of 4 Pole Manual Reduced Voltage Starter, information on request.

Bulletins 544 and 545—Primary Resistor Starters

Bulletins 564 and 565—Secondary Resistor Starters

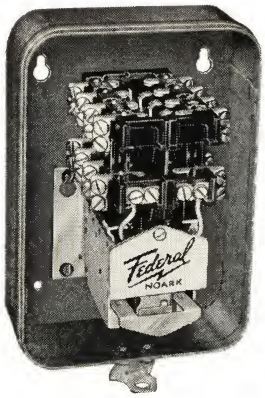
ADJUSTABLE PNEUMATIC TIMER—OVERLOAD PROTECTION

General Purpose NEMA Type 1 Enclosures

H.P. Rating	Bulletin 544 Non-Reversing		Bulletin 545 Reversing		H.P. Rating	No. of Accelerating Points	Bulletin 546 Non-Reversing		Bulletin 565 Reversing		Extra for Additional Accelerating Points
	220 V.	440-550 V.	220 V.	440-550 V.			220 V.	440-550 V.	220 V.	440-550 V.	
5	$ 264.00	$ 264.00	$ 406.00	$ 406.00	5	2	$ 492.00	$ 492.00	$ 702.00	$ 702.00	$210.00
7½	394.00	264.00	570.00	406.00	7½	2	492.00	492.00	702.00	702.00	210.00
10	412.00	412.00	588.00	588.00	10	2	492.00	492.00	702.00	702.00	210.00
15	428.00	428.00	604.00	604.00	15	2	492.00	492.00	702.00	702.00	210.00
20	556.00	464.00	844.00	640.00	20	3	924.00	924.00	1258.00	1134.00	228.00
25	576.00	484.00	862.00	660.00	25	3	924.00	924.00	1258.00	1134.00	228.00
30	594.00	594.00	880.00	880.00	30	3	924.00	924.00	1258.00	1258.00	228.00
40	1270.00	630.00	1728.00	916.00	40	3	1734.00	1012.00	2246.00	1346.00	228.00
50	1270.00	684.00	1728.00	970.00	50	3	1734.00	1012.00	2246.00	1346.00	228.00
60	1938.00	1294.00	.....	1748.00	60	3	1916.00	1804.00	2734.00	2316.00	228.00
75	1938.00	1294.00	.....	1748.00	75	3	1916.00	1804.00	2734.00	2316.00	228.00
100	2134.00	1294.00	.....	1748.00	100	4	2346.00	2044.00	3164.00	2558.00	300.00
125	.....	.....	.....	.....	125	4	.....	2346.00	.....	3164.00	300.00
150	.....	2026.00	.....	.....	150	4	.....	2478.00	.....	3294.00	300.00
175	.....	.....	.....	.....	175	4	.....	2478.00	.....	3294.00	300.00
200	.....	2238.00	.....	.....	200	5	.....	2880.00	.....	3698.00	388.00

Open types and dust-tight enclosures available. For prices and optional features, dimensions and weights, information on request. Prices do not include push button stations.

FEDERAL NOARK INDUSTRIAL CONTROLS



Bulletin 950

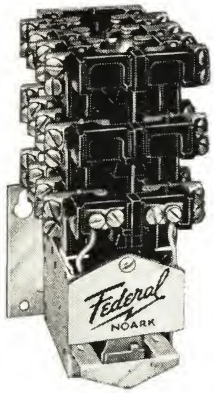
A.C. Solenoid Type Relays

1 to 12 Circuits Any Combination of Normally Open or Closed Circuits

Double Break—Pure Silver Contacts

SIZE 00

0 TO 600 VOLTS—10 AMPERE



No. of Ckts.	Circuits N.O.	Circuits N.C.	NEMA Type I General Purpose Enclosure Cat. No.	NEMA Type I General Purpose Enclosure List Price	Type U Open No Enclosure Cat. No.	Type U Open No Enclosure List Price
1	1	0	950A-10	$13.80	950U-10	$11.00
	0	1	950A-01	15.20	950U-01	12.40
2	2	0	950A-20	15.20	950U-20	12.40
	1	1	950A-11	16.50	950U-11	13.80
	0	2	950A-02	17.90	950U-02	15.20
3	3	0	950A-30	16.50	950U-30	13.80
	2	1	950A-21	17.90	950U-21	15.20
	1	2	950A-12	19.30	950U-12	16.50
	0	3	950A-03	20.70	950U-03	17.90
4	4	0	950A-40	17.90	950U-40	15.20
	3	1	950A-31	19.30	950U-31	16.50
	2	2	950A-22	20.70	950U-22	17.90
	1	3	950A-13	22.00	950U-13	19.30
	0	4	950A-04	23.40	950U-04	20.70
5	5	0	950A-50	26.20	950U-50	23.40
	4	1	950A-41	27.50	950U-41	24.80
	3	2	950A-32	28.90	950U-32	26.20
	2	3	950A-23	30.30	950U-23	27.20
	1	4	950A-14	31.70	950U-14	28.90
	0	5	950A-05	33.00	950U-05	30.30
6	6	0	950A-60	27.50	950U-60	24.80
	5	1	950A-51	28.90	950U-51	26.20
	4	2	950A-42	31.00	950U-42	27.50
	3	3	950A-33	31.70	950U-33	28.90
	2	4	950A-24	33.00	950U-24	30.30
	1	5	950A-15	34.40	950U-15	31.70
	0	6	950A-06	35.80	950U-06	33.00
7	7	0	950A-70	28.90	950U-70	26.20
	6	1	950A-61	30.30	950U-61	27.50
	5	2	950A-52	31.70	950U-52	28.90
	4	3	950A-43	33.00	950U-43	30.30
	3	4	950A-34	34.40	950U-34	31.70
	2	5	950A-25	35.80	950U-25	33.00
	1	6	950A-16	37.20	950U-16	34.40
	0	7	950A-07	38.50	950U-07	35.80
8	8	0	950A-80	$30.30	950U-80	$27.50
	7	1	950A-71	31.70	950U-71	28.90
	6	2	950A-62	33.00	950U-62	30.30
	5	3	950A-53	34.40	950U-53	31.70
	4	4	950A-44	35.80	950U-44	33.00
	3	5	950A-35	37.20	950U-35	34.40
	2	6	950A-26	38.50	950U-26	35.80
	1	7	950A-17	39.90	950U-17	37.20
	0	8	950A-08	41.30	950U-08	38.50
9	9	0	950A-90	42.70	950U-90	38.50
	8	1	950A-81	44.00	950U-81	39.90
	7	2	950A-72	45.40	950U-72	41.30
	6	3	950A-63	46.80	950U-63	42.70
	5	4	950A-54	48.20	950U-54	44.00
10	10	0	950A-100	45.40	950U-100	41.30
	9	1	950A-091	46.80	950U-091	42.70
	8	2	950A-082	48.20	950U-082	44.00
	7	3	950A-073	49.50	950U-073	45.40
	6	4	950A-064	50.90	950U-064	46.80
11	11	0	950A-110	48.20	950U-110	44.00
	10	1	950A-101	49.50	950U-101	45.40
	9	2	950A-092	50.90	950U-092	46.80
	8	3	950A-083	52.50	950U-083	48.20
	7	4	950A-074	53.70	950U-074	49.50
12	12	0	950A-120	50.90	950U-120	46.80
	11	1	950A-111	52.30	950U-111	48.20
	10	2	950A-102	53.70	950U-102	49.50
	9	3	950A-093	56.00	950U-093	50.90
	8	4	950A-084	56.00	950U-084	52.30

Normally closed contacts up to 12 can be supplied — Add **63c** list per contact to the normally open price.

Specify Bul. No., number of N.O. and N.C. contacts, type, voltage and frequency of coil circuit.

Ordering Information: Add suffix to catalog number to indicate volts and frequency.

CYCLES

Volts	60	50	40	30	25
110	−01	−02	−03	−04	−05
208/220	−06	−07	−08	−09	−10
440	−11	−12	−13	−14	−15
550	−16	−17	−18	−19	−20
600	−21	−22	−23	−24	−25

Standard coil ratings are 6, 12, 24, 110, 208/220, 440, 550, 600 volts; 25, 30, 40, 50 and 60 cycles. Others can be supplied.

FEDERAL NOARK PUSH BUTTON STATIONS

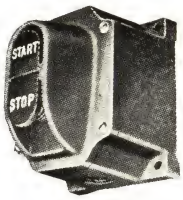
Bulletin 901—Standard Duty



600 Volts A.C. — ONE BUTTON STATION — 600 Volts D.C.

Marking	Enclosure	Cat. No.	List Price
†STOP	Sheet steel box bakelite cover	221	$5.50
START	Sheet steel box bakelite cover	211-3	5.50





TWO BUTTON STATION

START †STOP	Sheet steel box bakelite cover	202	$5.50
	Sheet steel box, die cast cover	202A	5.50
	Weather proof cast iron	202D	19.30
	Explosion resisting cast iron	202E	30.30
	Interior Only - No Enclosure	202U	4.00





Enclosures	Forward Reverse	Raise Lower	Up Down	Open Close	Fast Slow	List Price
General purpose NEMA Type I	212-2	212-3	212-4	212-5	212-6	$6.90
Steel plate for flush mounting, no box	212Y2	212Y3	212Y4	212Y5	212Y6	6.90

THREE BUTTON STATION



Enclosures	MARKINGS					List Price
	Forward Reverse Stop	Lower Raise Stop	Up Down Stop	Open Close Stop	Fast Slow Stop	
General Purpose NEMA Type I	303-2†	303-3†	303-4†	303-5†	303-6†	$16.50
Steel plate for flush mounting, no box	303Y2	303Y3	303Y4	303Y5	303Y6	13.80
Type U--Interior only. No enclosure	303U2	303U3	303U4	303U5	303U6	13.50

Bulletin 903—Heavy Duty

600 Volts A.C. — ONE BUTTON STATION — 600 Volts D.C.

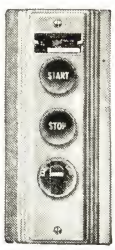




Enclosures	MARKINGS							List Price
	Stop	Start	Jog*	Reset				
General Purpose NEMA Type I	9A1-1	9A1-2	9A1-3	9A1-8				$11.00
Steel plate for flush mounting, no box	9Y1-1	9Y1-2	9Y1-3	9Y1-8				11.00

TWO BUTTON STATION

Enclosures	Start Stop	Jog* Stop	Forward Reverse	Fast Slow	Raise Lower	Up Down	Open Close	List Price
General Purpose NEMA Type I	9A2-1	9A2-2	9A2-3	9A2-4	9A2-5	9A2-6	9A2-7	$16.50
Steel plate for flush mounting, no box	9Y2-1	9Y2-2	9Y2-3	9Y2-4	9Y2-5	9Y2-6	9Y2-7	16.50



THREE BUTTON STATION

Enclosures	Forward Reverse Stop	Start Jog* Stop	Fast Slow Stop	High Low Stop	Raise Lower Stop	Up Down Stop	Open Close Stop	List Price
General Purpose NEMA Type I	9A3-1	9A3-2	9A3-3	9A3-4	9A3-5	9A3-6	9A3-7	$22.00
Steel plate for flush mounting, no box	9Y3-1	9Y3-2	9Y3-3	9Y3-4	9Y3-5	9Y3-6	9Y3-7	22.00

*Also available at extra charge with special jogging button that requires no relay. Refer to factory.

†Lockoff on the STOP button can be supplied. Add suffix "L" to catalog number and **$2.80** to list price.

Many other combinations are available; up to 8 units in HEAVY DUTY, with pilot lights and selector switches.

FEDERAL Noark STAB-LOK CIRCUIT BREAKERS

These Stab-lok Circuit Breakers were specifically designed to provide precision circuit protection at a new low cost.

1. Doubly Dependable: Because of the improved co-operative thermal-magnetic trip action, Stab-lok breakers pass momentary current surges and respond instantaneously to shorts and over loads. To assure precision protection, parts are micromatically calibrated prior to assembly in tamper-proof case.

2. Simple Breaker Installation: Installation is easy with Stab-lok. Merely slide the end of the breaker over the sturdy metal hook and press the 4-way stabs into the proper slot in the bussing.

3. New Combination Flush-Surface Enclosures: This new design permits the enclosure to be either flush or surface mounted.

FOR SINGLE PHASE, A.C.



101

101 Surface Enclosure

Rating: 30 Amp. Max. 120 V., A.C. 1 pole, 2 wire SN, Insulated Groundable Neutral.

Capacity: 1 single pole Stab-lok Breaker.

No Stab-lok Breakers included.

Price, **101** Surface Enclosure..**$1.92**



102

102 Surface Enclosure

Rating: 30 Amp., Max. 120/240 V., A.C. 2 pole, 2 and 3 wire SN. Insulated Groundable Neutral.

Capacity: 1 double pole (simultaneous trip) or 2 single pole Stab-lok Breakers.

No Stab-lok Breakers included.

Price, **102** Surface Enclosure **$2.02**
R102 Raintight (hubs additional) **6.02**



112S

112 Enclosures

Rating: 50 Amp. Max. 120/240 V. A.C. 2 pole, 2 and 3 wire, SN, Insulated Groundable Neutral.

Capacity: 2 single pole Stab-loks for 2 wire connections. 2 single pole or one double pole (simultaneous trip) Stab-lok Breakers for 3 wire connections.

No Stab-lok Breakers included.

Price, **112S** Surface Enclosure **$3.62**
112F Flush Enclosure **3.62**



104

104 Combination Flush-Surface Enclosure

Rating: 50 Amp. Mains 120/240 V., A.C. 3 wire SN. Insulated Groundable Neutral.

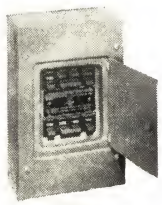
Capacity: 4 single pole Stab-loks or one double pole (simultaneous trip) Stab-lok in positions 2 and 3 and single pole Stab-lok in positions 1 and 4.

Price, **104,** Two 15 Amp. Stab-lok Breakers Included **$8.44**
R104, Raintight. Includes two 15 Amp. single pole Stab-lok Breakers. Hubs additional..... **10.86**

STAB-LOK SINGLE POLE CIRCUIT BREAKERS

Amperage*	Cat. No.	List Price	Amperage*	Cat. No.	List Price
15	**15**	**$1.81**	40	**40**	**$1.81**
20	**20**		50	**50**	
30	**30**				

*25 and 35 amp. Stab-loks available.



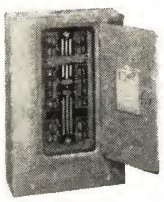
108

108 Combination Flush-Surface Enclosure

Rating: 70 Amp. Mains 120/240 V. A.C. 3 wire SN. Insulated Groundable Neutral.

Capacity: 8 single pole Stab-loks or two double pole (simultaneous trip) Stab-loks in positions 2 & 3 and 6 & 7 with four single pole Stab-loks in positions 1, 4, 5, 8.

Price, **108** Includes two 15 Amp. single pole Stab-lok Breakers **$10.86**



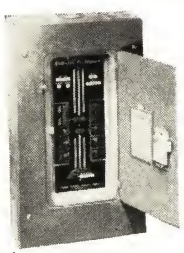
116

116 Combination Flush-Surface Enclosure

Rating: 100 Amp. Mains. 120/240 V. A.C. 3 wire SN. Insulated Groundable Neutral.

Capacity: 16 single pole or two double pole (simultaneous trip) Stab-loks in positions 7 & 9, 8 & 10 plus 12 single pole Stab-loks in positions 1, 2, 3, 4, 5, 6, 11, 12, 13, 14, 15, 16.

Price, **116** Includes two 15 amp. single pole Stab-lok Breakers **$15.68**

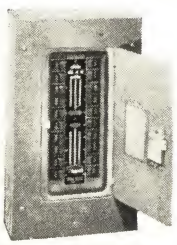


NBS310L Combination Flush-Surface Enclosure

Rating: 70 Amp. Mains. 120/240 V. A.C. Single phase 3 wire SN.

Capacity: 10 single pole or 4 double pole (simultaneous trip) Stab-loks and two single pole Stab-loks. These can be placed in any position.

Price, **NBS310L,** Includes two 15 amp. single pole Stab-lok Breakers..... **$47.18**



NBS320L Combination Flush-Surface Enclosure

Rating: 100 Amp. Mains, 120/240 V. A.C. Single phase 3 wire SN.

Capacity: 20 single pole or 10 double pole (simultaneous trip) Stab-lok Breakers. These can be placed in any position.

Price, **NBS320L,** Includes two 15 amp. single pole Stab-lok Breakers..... **$72.42**

ACCESSORIES

Handle extensions, per pair..... **$0.36**

Hubs

Size	Location	Prefix to Cat. No.	Add to List Price
¾"	1 top	C	**$2.18**
1"	1 top	D	**2.18**
1¼"	1 top	E	**2.18**

Discount Schedule B-1

BULLDOG *Pushmatic* ELECTRI-CENTERS—(THERMAL MAGNETIC TYPE)



CATALOG No. 2000

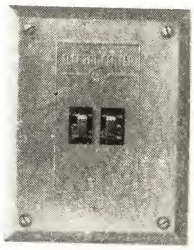
2 Wire 120V. AC—3 Wire 120/240V. AC Insulated (Groundable) Neutral
1 or 2 CIRCUITS—MAIN WIRE GRIPS—40 Amp. (Max.)

	Cat. No. Surface	Cat. No. Flush	List Price
Basic Device (Box with Neutral and Front but no Pushmatics)	**2000S**	**2000F**	**$1.70**

Note: Pushmatic Units are not assembled in the Basic Device but will be provided by Distributor for assembly by the Purchaser.
The Total List Price would then be:

BASIC DEVICE with One 1-Pole Pushmatic (Max. 40A)	**$4.50**
BASIC DEVICE with Two 1-Pole Pushmatics (Max. 40A)	**7.30**

No Filler Plates required: Front has twist-out.
Box: 6⅛" H., 4⅛" W., 3" D.



CATALOG No. 5320

2 Wire 120/240V. AC—Insulated (Groundable) Neutral
MAX. OF 2 CIRCUITS—MAIN WIRE GRIPS—50 Amp. (Max.)

	List Price
Basic Device (Consisting of Box, One 2-Pole Tie Handle and Two Thermal Magnetic Pushmatics (50 Amp. Only)	**$10.40**
Front: (Flush Cat. No. FF5 or Surface Cat. No. FS5)	**1.20**
	Total List **$11.60**

Box: 8¼" H., 6" W., 3¼" D.

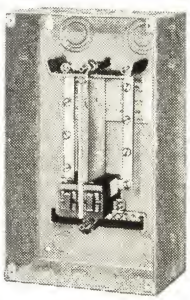


CATALOG No. 4340

3 Wire 120/240V. AC—Insulated (Groundable) Neutral
MAX. OF 4 CIRCUITS—MAIN WIRE GRIPS—50 Amps.

	List Price
Basic Device (Consisting of Box and Four 15 Amp. Thermal Magnetic Pushmatics)	**$13.00**
Front (Flush Cat. No. FF4 or Surface Cat. No. FS4)	**1.20**
	Total List **$14.20**

Box: 8¼" H., 6" W., 3¼" D.

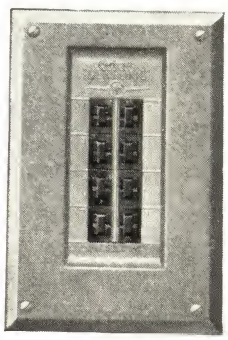


CATALOG No. 8320

3 Wire 120/240V. AC—Insulated (Groundable) Neutral
MAX. OF 8 CIRCUITS—MAIN WIRE GRIPS—70 Amps.

	List Price
Basic Device (Consisting of Box, One 2-Pole Tie Handle and Two 15 Amp. Thermal Magnetic Pushmatics)	**$12.55**
Front (Flush Cat. No. FF8 or Surface Cat. No. FS8)	**1.45**
	Total List **$14.00**

Box: 12" H., 7½" W., 3½" D.
Any additional Filler Plates or Pushmatic Units above the Basic Device will not be assembled in Panelboard but will be provided by Distributor from Stock for assembling by the Purchaser.



8 CIRCUIT DEVICE—Catalog No. 8320 (Cont'd)

3 Wire 120/240V. AC—Insulated (Groundable) Neutral
MAIN WIRE GRIPS—70 Amps.

The above Data gives a description of the BASIC DEVICE and List Price of Cat. No. 8320. The Data below has been worked out as a Quick Reference Table to show the Total List Prices from 2 to 8 Circuits. They include the Basic Device and Front PLUS all the additional Pushmatic Units and Filler Plates which the Distributor would furnish from Stock for assembling by the Purchaser.

Total 1 Pole Circuits	Additional Filler Plates Required	Additional Pushmatics Required	Total List	Total 1 Pole Circuits	Additional Filler Plates Required	Additional Pushmatics Required	Total List
2	6	--	**$15.08**	6	2	4	**$25.56**
3	5	1	**17.70**	7	1	5	**28.18**
4	4	2	**20.32**	8	--	6	**30.80**
5	3	3	**22.94**	--	--	--	-----

BULLDOG PUSHMATIC ELECTRI-CENTERS

(Thermal Magnetic Type)

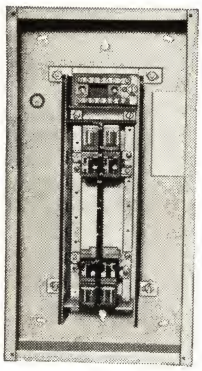
1 Phase, 3 Wire, Solid Neutral, 120/240V. AC—Main Wire Grips 100 Amps.

Branch Circuits Max. No. Possible	Cat. No.	Basic Device (Includes the following)	List Price	Fronts Without Door* Flush Cat. No.	Surface Cat. No.	List Price	Total List Price Basic Device and Front*
14	PB304-14L	Box and Interior; Two—15A. 1 Pole Pushmatics; Two—20A. 1 Pole Pushmatics; Four—Filler Plates; One—2 Pole Tie Handle	$25.40	PMF-20	PMS-20	$3.60	$29.00
20	PB304-20L	Same as above	35.70	PMF-24	PMS-24	$4.80	$40.50

3 Phase, 4 Wire, Solid Neutral, 120/208V. AC—Main Wire Grips 100 Amps.

14	PB404-14L	Box and Interior; Two—15A. 1 Pole Pushmatics; Two—20A. 1 Pole Pushmatics; Four—Filler Plates; One—2 Pole Tie Handle	$34.90	PMF-20	PMS-20	$3.60	$38.50
20	PB404-20L	Same as above	45.70	PMF-24	PMS-24	$4.80	$50.50

*Door is optional for above Panels. If door is required add the following:



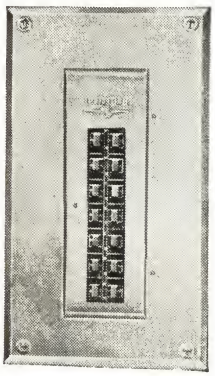
Basic Device (14 Circuit)

Catalog Number	Cat. No.	List Price	Total List With Door
PB304-14L	PMD-20	$10.00	$39.00
PB304-20L	PMD-24	12.00	52.50
PB404-14L	PMD-20	$10.00	$48.50
PB404-20L	PMD-24	12.00	62.50

Any additional Filler Plates or Pushmatic Units above the Basic Device will not be assembled in Panelboard but will be provided by Distributor from stock for assembling by the Purchaser.

Prices Figured—No Need to Calculate

The following Prices include the Basic Device and Front PLUS all necessary Pushmatic Units and Filler Plates to complete the Panel for the circuits desired.



Complete Panel (without Door)

Basic Device is packed in individual carton. Std. Pkg. Qty.—5 Cartons.
Fronts—Carton Qty. 5; Doors—Carton Qty. 5.

Max. 14 Circuits
(Box Dimens. 20¼"H., 10¾" W., 3¾" D.)

Total 1P. Branch Circuits	Additional Filler Plates Required	Additional Pushmatics Required	Total List PB304-14L	Total List PB404-14L
4	6	..	$30.08	$39.58
5	5	1	32.70	42.20
6	4	2	35.32	44.82
7	3	3	37.94	47.44
8	2	4	40.56	50.06
9	1	5	43.18	52.68
10	..	6	45.80	55.30
11	..	7	48.60	58.10
12	..	8	51.40	60.90
13	..	9	54.20	63.70
14	..	10	57.00	66.50

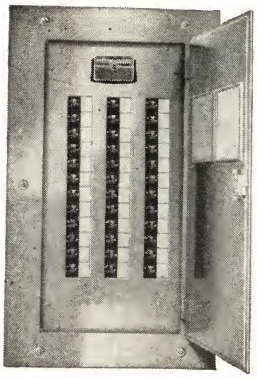
(List Prices DO NOT include DOOR—
Add **$10.00** if DOOR desired.)

Max. 20 Circuits
(Box Dimens. 24¼"H., 10¾" W., 3¾" D.)

Total 1P. Branch Circuits	Additional Filler Plates Required	Additional Pushmatics Required	Total List PB304-20L	Total List PB404-20L
10	6	6	$58.38	$68.38
11	5	7	61.00	71.00
12	4	8	63.62	73.62
13	3	9	66.24	76.24
14	2	10	68.86	78.86
15	1	11	71.48	81.48
16	..	12	74.10	84.10
17	..	13	76.90	86.90
18	..	14	79.70	89.70
19	..	15	82.50	92.50
20	..	16	85.30	95.30

(List Prices DO NOT include DOOR—
Add **$12.00** if DOOR desired.)

BULLDOG PUSHMATIC ELECTRI-CENTERS



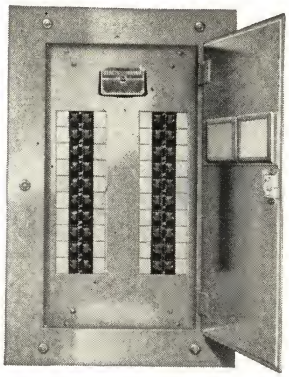
TYPE "P3B" PUSHMATIC ELECTRI-CENTERS

Furnished in assemblies of 3 vertical rows — one vertical row per phase — for perfectly balanced 3 phase 4 wire sequence phasing. Available in assemblies from 12 to 42 circuits, with main lugs or main breaker. Cabinets of Code gauge steel are 20 inches wide with 4-inch wiring gutters.

3 Phase, 4 Wire Solid Neutral—120/208V. AC

Cat. No.	Ampere Mains	Branch Circuits	List Each
P3B12-4L	70	12	$148.00
P3B15-4L	70	15	166.00
P3B18-4L	100	18	184.00
P3B21-4L	100	21	202.00
P3B24-4L	100	24	220.00
P3B27-4L	100	27	238.00
P3B30-4L	100	30	256.00
P3B33-4L	200	33	274.00
P3B36-4L	200	36	292.00
P3B39-4L	200	39	310.00
P3B42-4L	200	42	328.00

TYPE "P2B" PUSHMATIC ELECTRI-CENTERS



This type is furnished in assemblies from 12 to 40 circuits, 3 wire single phase, solid neutral, with main lugs or main breaker. Ideal for installations requiring compact control center having a minimum height. They have 20-inch wide cabinets with 4-inch wiring gutters.

3-Wire, Solid Neutral, 120/240V. AC

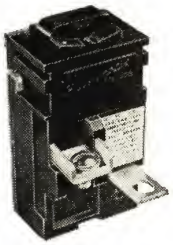
Cat. No.	Ampere Mains	Branch Circuits	List Each
P2B12-3L	100	12	$139.00
P2B14-3L	100	14	151.00
P2B16-3L	100	16	163.00
P2B18-3L	100	18	175.00
P2B20-3L	100	20	187.00
P2B22-3L	200	22	199.00
P2B24-3L	200	24	211.00
P2B26-3L	200	26	223.00
P2B28-3L	200	28	235.00
P2B30-3L	200	30	247.00
P2B32-3L	200	32	259.00
P2B34-3L	200	34	271.00
P2B36-3L	200	36	283.00
P2B38-3L	200	38	295.00
P2B40-3L	200	40	307.00

Mains: Lugs only prices listed; also available with circuit breaker units.

Branches: Prices based on 15 to 50 A. Thermal Magnetic S.P. units (Specify ratings). Add for substitution of Thermal Ultra Magnetic—**$0.70** per pole; for Thermal Ultra Magnetic with Ambient Compensation—**$1.20** per pole.

Fronts: Gray enamel finish.

BULLDOG PUSHMATIC ELECTRI-CENTERS



BullDog

Pushmatic

CIRCUIT BREAKERS

15, 20, 30, 40 and 50 A.

Pushmatics are compact, single pole circuit breakers, Underwriters' Approved at 120 volts AC and 120-240 volts AC when two units are joined by a tie handle for a two pole circuit. An identical push of the operating button is all that is required either to switch circuit "ON" or "OFF" or to switch "ON" after automatic trip.

Pushmatics are available in these types: Thermal Magnetic, Thermal Ultra Magnetic and Thermal Ultra Magnetic with exclusive Ambient Compensation feature. Regardless of type of rating, all Pushmatic units have the same size and contour and are individually interchangeable.

Mounting rib and locking bar arrangement makes it easy to assemble Pushmatics in Electri-Centers to meet exact specifications or to interchange units any time after installation.

Insertion, removal, replacement and interchanging of Pushmatic units have been simplified as far as good engineering practice will permit. Thus, confusion has been eliminated and installation time and cost reduced. Whatever changes the future may demand on Pushmatic Electri-Centers, alterations to their Pushmatic interior assemblies will be made in a fraction of the time ordinarily required. Furthermore, completed assemblies will always retain neat, symmetrical appearance of original installation, regardless of changes made.

THERMAL-ULTRA-MAGNETIC PUSHMATICS

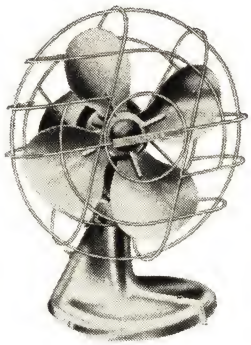
Amp. Rating	Without Ambient Compensation Cat. No.	Without Ambient Compensation List Each	With Ambient Compensation Cat. No.	With Ambient Compensation List Each
15	31115	$3.50	41115	$4.00
20	31120	3.50	41120	4.00
30	31130	3.50	41130	4.00
40	31140	3.50	41140	4.00
50	31150	3.50	41150	4.00

ACCESSORIES

Cat. No.	Description	List Each
PTH-2	2 Pole Tie Handles	$0.60
PFP-2	Blank Filler Plates	.18
PHL-1	Locking Devices	.40

HUNTER ELECTRIC OSCILLATING FANS

10- AND 12-INCH STANDARD FANS



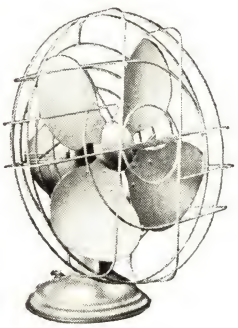
The Standard Fan incorporates many of the outstanding features of luxury models. Rugged, shaded-pole motors are single-speed on 10-inch, two-speed on 12-inch. Both models are designed for wall mounting. Totally enclosed oscillating mechanism is adjustable for stationary or oscillating service. Silver-blue lacquer finish.

Operate on 115 volt, 60 cycle, A.C. Guaranteed 1 year.

Cat. No.	Size Inches	C.F.M. Rating	Shipping Wt. Lbs.	Price Each
36004A	10	670	7	**$17.45**
37004A	12	820	9	**24.95**

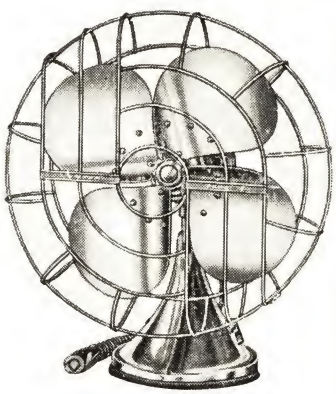
16-INCH STANDARD OSCILLATING FAN

Powerful, dependable motor and wide, scientifically designed blades deliver 1500 cu. ft. of air per minute. The 3-speed, shaded-pole will provide years of trouble-free service. Totally-enclosed oscillating mechanism. Attractive silver-blue lacquer finish with sturdy bright-finish guard. Adaptable for wall mounting. The quality leader of the economy fan field. Shipping weight 25 lbs. Guaranteed 5 years.



No. **2250**, 115 Volt, 60 Cycle, A.C.....**$43.95**

12- AND 16-INCH ZEPHAIR OSCILLATING FANS



Typical of famous Hunter quality, Zephair oscillating fans are designed for home or office use. Equipped with wide, polished aluminum blades and a totally enclosed 3-speed motor, they are easily adjusted for wall mounting. The motor housing and base are finished in black satin lacquer. Underwriters' approved. Guaranteed 5 years.

Cat. No.	Size Inches	C.F.M. Rating	Shipping Wt. Lbs.	Price Each
235	12	1150	21¼	**$43.95**
265	16	1700	27	**52.95**

Operate on 115 volt, 60 cycle, A.C.

All Prices include Federal Tax

HUNTER FLOOR FAN

360 DEGREE CIRCULATION



The new Hunter Floor Fan combines efficient operation, smart styling and sturdy modern design. Utilizing a new cooling principle, this popular fan lifts cooler floor-level air upward and outward, directing air currents into room corners. Constructed of dubonnet plastic with chrome-plated legs and grille. 3-speed rubber-mounted motor.

Doubles as a seat or low table. 3500 C.F.M. rating. Shipping weight, 26½ lbs. Guaranteed 5 years.

No. **40004A**, 115 Volt, 60 Cycle, A.C.....**$49.95**

HUNTER PEDESTAL FAN

16-INCH OSCILLATING



Particularly suitable for homes, offices, salesrooms and stores, where appearance, large breeze capacity, quiet operation and economical, dependable service are important. Modern streamlined styling of the motor body, column and base. Color-harmonizing silver lacquer finish makes them equally appropriate in hotels, theaters or restaurants.

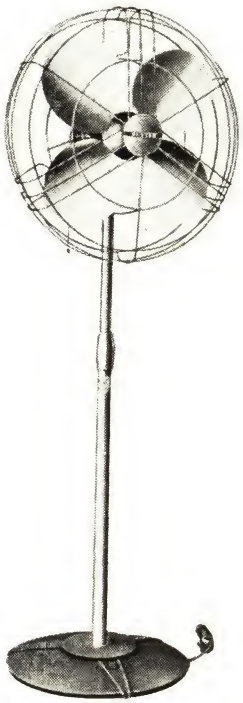
The distinctive appearance of this quality fan is surpassed only by its ability to provide enormous quantities of cool, refreshing air. Essentially the same in appearance and performance as 16-inch Standard, the Hunter Pedestal Fan is outstanding for its overall efficiency. Four big, wide blades, developed and perfected by exhaustive scientific tests, have been engineered to attain the greatest advantage from the powerful, shaded pole motor. A sturdily constructed, bright finish guard provides the utmost in personal safety without unnecessary sacrifice of air delivery.

Adjustable in height from 38 to 62 inches, the Pedestal Fan is mounted on an attractive, telescoping column. Located on the column, a convenient, four-position switch controls the three motor speeds. Vertical elevation of air delivery is controlled by a friction hinge. A patented safety mechanism locks the fan in the desired position. An improved oscillating mechanism, enclosed in the motor body and sealed against oil leakage, provides slow, even oscillation. Guaranteed for 5 years.

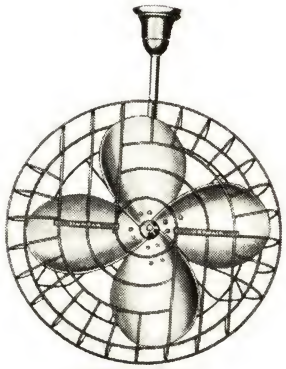
115 volts, 60 cycle, A.S. Shipping weight, 32½ pounds.

No. **3550**, Pedestal Fan.....**$59.95**

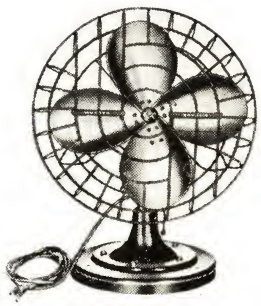
HUNTER ELECTRIC AIRSPEED CIRCULATORS



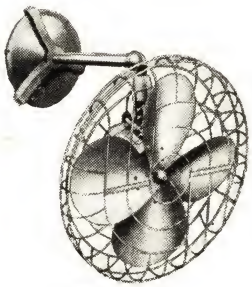
Floor Model



Ceiling Model



Counter Model



Wall Model

Airspreads provide effective, economical cooling for commercial and industrial use where minimum investment, dependable operation and large circulating capacities are required.

The low current consumption motor is mounted on special "floating power" rubber cushions for quiet operation. Fan speed is conveniently regulated by pull-switch. A special locking device permits easy adjustment of the fan so that the high velocity airstream can be directed wherever desired for most effective cooling. Floor model is complete with 15 foot cord and plug.

Ceiling, Counter and Wall Model Airspreads are exactly the same in construction and performance as the Floor Model Airspreads, except for method of mounting.

On high speed this circulator gives a tremendous circulation of high-velocity cool air that will refresh larger interiors in the most stifling weather. On second speed they operate so quietly that they are scarcely noticed except for the pleasing circulation of fresh, cool air.

Hunter Circulators are ideally suited to home service. Not only are they used most effectively in large living rooms (on second speed) and on summer porches, but are equally adaptable for cooling bedroom at night. Guaranteed 5 years.

C.F.M. ratings: 24-inch models, 5250; 30-inch models, 6500.

Non-oscillating 24-inch and 30-inch Air Circulators

Cat. No.	Type	Size In.	Speeds	Watts	Shpg. Wt. Lbs.	Price Each
2420	Floor	24	2	250	113½	**$129.00**
1420	Ceiling	24	2	250	47	**104.00**
3420	Counter	24	2	250	64½	**114.00**
4420	Wall	24	2	250	61¾	**114.00**
31004-FB	Floor	30	2	330	133¾	**136.00**
31004-CB	Ceiling	30	2	330	67½	**111.00**
31004-BB	Counter	30	2	330	84¾	**120.00**
31004-WB	Wall	30	2	330	82	**120.00**

115 Volt, 60 Cycle, A.C.

All air deliveries (cubic feet of air per minute) given for Hunter Fans are measured in accordance with standards set by the National Electrical Manufacturers' Association.

All Prices Include Federal Excise Tax

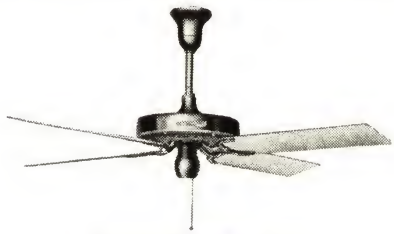
Bench, ceiling and wall models are packed in three cartons. Floor model is packed in four cartons.

HUNTER CEILING FANS

36- AND 52-INCH STANDARD AND HOTEL TYPES



52-Inch Hotel Type
6-inch Holder for Glassware but Without Glassware



52-Inch Standard Type

Operating at very slow speeds, Hunter Ceiling Fans are ideal for quiet circulation of large volumes of air at low velocities. The induction type motor has thrust ball bearings that revolve in leak-proof reservoir of oil that recirculates over the shaft. "Adaptair" is a patented device for changing angle of fan blades so that air movement may be directed down for normal use, or up if indirect air movement is desired. This adjustment is made merely by moving a small lever. Adaptair is available on Cat. Nos. 121, 113-NL and 113-1L. All models are handsomely finished in long-lasting black lacquer. Standard Types are Underwriters' approved. Fans operate on 115 Volt, 60 Cycle, A.C. Guaranteed 5 years.

52-Inch Ceiling Fans—3 Speeds

Cat. No.	Description	Shpg. Wt. Lbs.	Price Each
121	Adaptair, Standard Type	61	**$94.00**
***123-NL**	Adaptair, Hotel Type	62	**101.00**
‡113-1L	Adaptair, Hotel Type	62	**102.00**
107	Standard Type	60	**85.00**
***109-NL**	Hotel Type	61	**91.00**
‡109-1L	Hotel Type	61	**92.00**

36-Inch Ceiling Fans

363	Standard Type	32	**$67.00**
§360	Hotel Type	30	**72.00**
▲361	Hotel Type	30	**73.00**
•362	Hotel Type	30	**74.00**

*One 3-speed switch to control fan. Light controlled by wall switch.

‡Two switches; 3-speed switch to control fan, one to control light.

§Arranged for wall switches for fan and light.

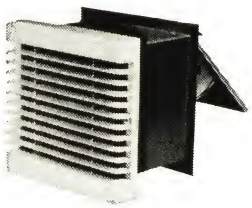
▲One levolier switch to control fan; light controlled by wall switch.

•Two levolier switches to control fan and light.

36-inch Standard fan has 2 speeds; Hotel type, single speed.

HUNTER VENTILATING FANS

AEROPEL KITCHEN VENTILATOR



8-Inch Kitchen Ventilator

Designed to remove cooking odors from the kitchen, the 5-H Aeropel will also serve efficiently in recreation room, bath, office and other similar applications. The white plastic grille with its smooth, molded lines harmonizes with modern architectural design.

The efficient 3-bladed aerocurve propeller (one-piece molded bakelite on fabric base), is driven by a totally enclosed quiet-operating motor which is mounted on a resilient spring mounting.

This fan is equipped with an automatic outside weather door that opens when the fan starts and closes when it stops. The fabricated steel wall box contains an electrical terminal box with a plunger-type off-on switch operated by a pull chain.

Suitable for installation in frame, brick or brick veneer walls, this fan may be installed in horizontal or vertical position. Delivers 400 C.F.M. Guaranteed 1 year.

Shipping Weight 21½ lbs.

No. **5-H** Aeropel, 115 Volts, 60/50 Cycles, A.C. **$49.35**

8-INCH VENTILATING FAN



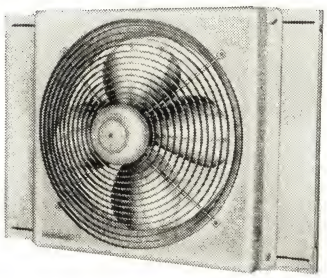
Ideally suited for elevators, phone booths, lavatories and similar installations. The ball bearing motor is enclosed against injurious dust and moisture. This ball bearing construction permits upward, downward or horizontal discharge of air current. The entire motor, blades and mounting ring are finished in semi-gloss black enamel. Furnished with 8-foot cord and plug. Under normal operating conditions this fan will require lubrication only once each year. Guaranteed one year.

Shipping Weight 8 pounds.

No. **5033 SP-5**, 110 Volt, 60 Cycle, A.C. **$22.00**

HUNTER WINDOW FANS

18- AND 22-INCH ELECTRICALLY REVERSIBLE WINDOW FANS

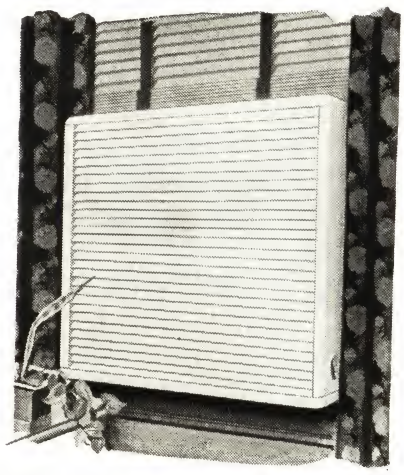


Hunter's new, high-performance, portable 18- and 22-inch Window Fans provide ample air movement for the cooling and ventilating needs for small homes, apartments and offices. The electrically reversible, capacitor type motor changes direction of the air flow at a flick of the switch. High and Low speeds in both forward and reverse permit regulation to suit the owner's personal preference. 18-inch model is adjustable to windows up to 39 inches wide. Installed merely by hanging on four screws in window frame. Cream enamel finish with silvered grille.

Operate on 115 volt, 60 cycle, A.C.

Cat. No.	Size Inches	C.F.M.	Shpg. Wt. Lbs.	Price Each
B-2500	18	2500	44	**$59.95**
B-3400	22	3400	68½	**79.95**

HUNTER 28-INCH WINDOW FAN



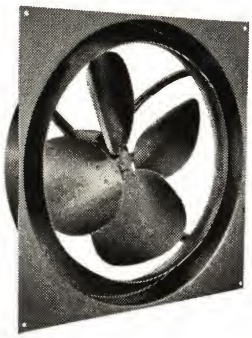
Easy to install, this Hunter 28-inch Window Fan is unusually compact and is smartly styled with built-in louvers that assure a smooth flow of air — provide privacy and absolute safety.

Finished in smooth ivory enamel, the Hunter 28-inch Window Fan has a certified air delivery of 4250 C.F.M., equal to that of many attic fans. The 2-speed, direct-connected motor is mounted on rubber for quiet, vibrationless operation. Convenient switch regulates air movement to personal desire of the user. Guaranteed 5 years. Shipping weight, 102 lbs.

Cat. No.	Description	Price Each
B-2848	Window Fan, 115 V., 60 Cycle, A.C.	**$109.95**
	Accessories for B-2848	
ES-28	Automatic Outside Shutters	**32.50**
B-28153	Outside Wire Guard	**9.95**
B-28199	Side Panels	**4.95**

HUNTER EXHAUST FANS

12-, 16-, 18-INCH MODELS



Designed for use wherever medium-duty commercial or industrial ventilation is required, these fans may be installed in either vertical or horizontal position. Much easier to install than the conventional circular types, these fans are mounted in a square panel. The cool-operating, two-speed, capacitor-type motor is mounted in rubber for quiet dependable performance and is totally enclosed against dust and moisture, thus assuring years of trouble-free service. All three models have ball bearing construction and may be readily equipped with automatic shutters if desired. Air delivery ratings are certified. Complete with two-speed toggle switch. Guaranteed 1 year.

Cat. No.	Size Inches	C.F.M.	Shpg. Wt. Lbs.	Price
E1240	12	1000	20	**$49.95**
E1650	16	1800	25	**59.95**
E1850	18	2375	31	**69.95**

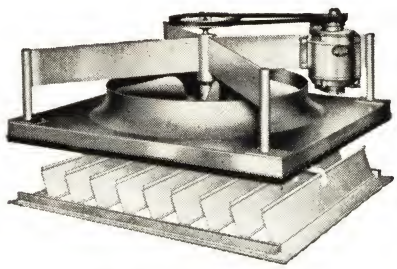
AUTOMATIC WALL SHUTTERS FOR EXHAUST FANS



These shutters make no significant change in fan performance. Constructed with mill-rolled steel frames and aluminum blades with felt seals. Bronze bearings eliminate vibration and allow free movement of the shutter blades. Designed to furnish protection against the weather, these units provide an effective closure, offer minimum resistance to air flow.

Shutter No.	For Fan No.	Size of Opening Inches	Price
ES14	E1240	14x14	**$16.26**
ES18	E1650	18x18	**21.00**
ES20	E1850	20x20	**23.64**

HUNTER PACKAGE ATTIC FANS



4700 BV-S and 6800 BV-S
With Automatic Ceiling Shutter

Features

1. New automatic shutter.
2. Fan unit mounted on rubber.
3. Thermal overload protection.
4. Built in fuse link.
5. Positive air seal on fan unit.
6. Certified air delivery ratings.
7. Underwriters' Laboratories approved.
8. Fan guaranteed 5 years; motor and shutter 1 year.

No other fan can be installed as quickly and cheaply. All necessary parts are shipped as two complete assemblies: the fan unit and the automatic shutter unit. After exhaust and ceiling openings have been prepared, the fan is merely set in place — no fastenings needed. The shutter fastens with screws to the ceiling opening frame, with the flange forming a ceiling trim.

AUTOMATIC SHUTTER

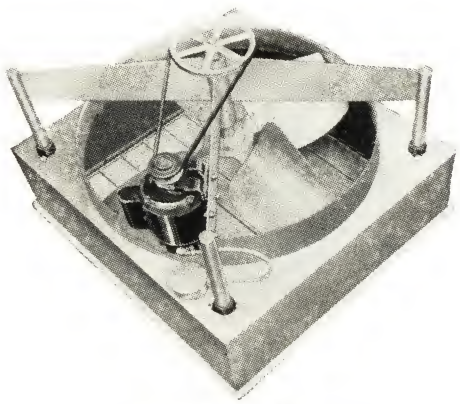
The new automatic ceiling shutter is operated by a combination of air pressure and spring tension. Blades open wide when fan is turned on and close tightly when the fan is off. Special "weatherstrip" construction of shutter blades eliminates drafts when shutter is closed. Built-in fuse link provides fire protection. Shutter and trim have light ivory finish of baked enamel to harmonize with all color schemes.

Cat. No.	C.F.M.	H.P.	Shpg. Wt. Lbs.	Price Each
4700 BV-S	4750	1/6	110	**$149.50**
6800 BV-S	6800	1/4	132	**169.50**

Dimensions in Inches

Cat. No.	Overall Dimensions	Shutter Dimension Including Flange	Ceiling Opening Required
4700 BV-S	32 x36 x16	32 x36½	30½x34½
6800 BV-S	35¼x40¼x17½	35⅜x40¼	33⅜x38⅛

HUNTER PACKAGE ATTIC FANS



7600 GV and 95 GV
With Built-in Manual Shutter

Features

1. Heavy-duty motor.
2. Streamlined orifice.
3. Precision-balanced blades.
4. Sound-tested ball bearings.
5. Built-in fuse link.
6. Certified air delivery.
7. Underwriters' approved.
8. Fan guaranteed 5 years; motor and shutter 1 year.

A Hunter Package Attic Fan is a complete home-cooling system especially designed for easy installation. It costs less to install than any other attic fan of comparable quality or capacity. There are no accessories to build or buy. Because it mounts in a simple ceiling opening, no expensive suction box is necessary. Shutter and switch are built-in, eliminating the cost of separate installation.

BUILT-IN SAFETY SHUTTER

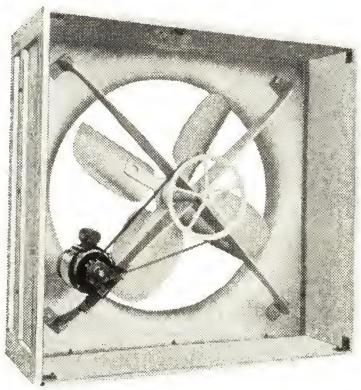
A gentle pull on the chain opens the shutter and starts the fan. Shutter blades lock open in vertical position, eliminating back pressures and air noise. Constant tension on louver prevents vibration. Built-in fuse link stops fan and closes shutter in the event of fire. Shutter blades and trim are finished in light ivory enamel.

Cat. No.	C.F.M.	H.P.	Shpg. Wt. Lbs.	Price Each
7600 GV	7700	1/4	189	**$199.50**
95 GV	9700	1/3	184	**219.50**

Dimensions in Inches

Cat. No.	Overall Dimensions	Shutter Dimension Including Flange	Ceiling Opening Required
7600 GV	38x40x26	39¾x42½	38⅜x40⅞
95 GV	38x40x26	39¾x42½	38⅜x40⅞

HUNTER BELT-DRIVEN EXHAUST FANS



Mechanical Details for All Sizes

1. V-Belt drive insures long life, quiet operation.
2. Ball bearing motors insure many years of trouble-free service.
3. Thermal overload protection prevents burned out motors in case of low voltage or overload.
4. Heavy-gauge, die-formed steel blades give uniform air velocity over entire blade area.
5. One-piece streamlined orifice increases air delivery and reduces power consumption.
6. Cast iron blade hub carefully machined to fan shaft.
7. Entire blade assembly statically balanced to assure vibrationless performance.
8. Blade shaft mounted on ball bearings — absorb thrust load — permit operation in any position.
9. Mounting arms offer minimum resistance to air flow — absorb vibration.
10. All models Underwriters' approved.
11. Shipping crate designed for use in installation; may be removed, however, for special application.
12. Fan guaranteed 5 years; motor 1 year.

Single Speed, 115 Volts, 60 Cycles

Cat. No.	Size Inches	C.F.M.	H.P.	Overall Dimens. Inches	Price* Each
50-AXB	24	5100	1/6	34 x34 x18½	**$139.50**
75-BXB	30	7500	¼	42¼x42¼x21	**164.00**
10-DXB	36	11,400	⅓	48¼x48¼x21	**199.50**
14-FXB	42	16,000	½	54¼x54¼x25¾	**244.00**
18-HXB	48	20,000	½	60¼x60¼x25¾	**279.50**
18-HXB-3	48	22,500	¾	60¼x60¼x25¾	**299.50**

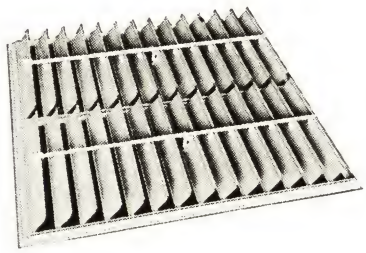
*Two-speed motors without Underwriters' Label available at extra cost.

HUNTER AUTOMATIC SHUTTERS

For Belt-Driven Exhaust Fans

AUTOMATIC CEILING SHUTTERS

The frame of this all-steel shutter serves as ceiling trim. Adjustable spring mechanism counterbalances the blades so that shutter opens easily. A guard rail protects hinge rods from binding and covers edge of plaster. Steel shutter blades eliminate rattling when closed. Built-in fuse link provides fire protection.



Ceiling Shutters

Shutter Cat. No.	For Fan Cat. No.	Shutter Size Incl. Trim	Ceiling Open. Required	List Price*
CS-47	50-AXB	32 x36½	30½x34½	**$41.00**
CS-68	75-BXB	35⅜x40¼	33¾x38⅛	**49.00**
CS-114	10-DXB	40 x51¼	38⅜x49⅛	**60.00**
CS-160	14-FXB	51⅛x54⅞	49¼x52⅞	**70.50**
CS-200	18-HXB	62 3/16x62	60¼x60¼	**80.00**
CS-225	18-HXB-3	62 3/16x69¼	60¼x67½	**85.50**

*Including Federal Excise Tax.

AUTOMATIC WALL SHUTTER

Frames are made of mill-rolled steel angle, electric welded to prevent warping. Aluminum shutter blades offer minimum resistance to air stream. Felt seals are crimped (not cemented) into the blades to seal openings. Self-aligning bronze bearings eliminate hinge-rod vibration and maintain free movement of the louver blades.

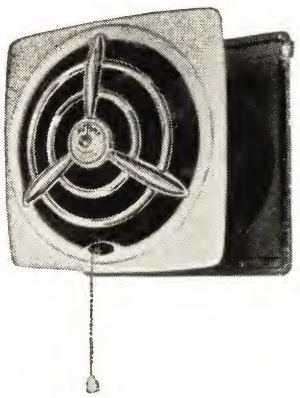
Wall Shutters

Shutter Cat. No.	For Fan Cat. No.	Shutter Size Incl. Trim	Wall Open. Required	List Price*
ES-26	**50-AXB**	29x29	26x26	**$30.00**
ES-32	**75-BXB**	35x35	32x32	**43.50**
ES-38	**10-DXB**	41x41	38x38	**51.50**
ES-44	**14-FXB**	47x47	44x44	**60.00**
ES-50	**18-HXB** / **18-HXB-3**	53x53	50x50	**68.00**

*Including Federal Excise Tax.

NuTONE VENTILATING FANS

10-INCH DELUXE WALL VENTILATING FAN



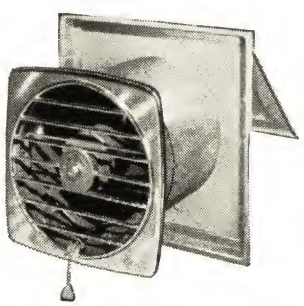
Easy to clean — attractive style — true dependability — quiet but powerful. Screw driver is the only tool needed to install. Three screws lock telescoping sleeves in correct position. Motor unconditionally guaranteed for 5 years. Motor and blade removable for cleaning of inner sleeve.

Standard finish — white baked enamel wall plate with quickly removable center grille in white.

NF-10 —Fits brick walls 7 to 12⅛ inches thick.*
Fits brick walls 5 to 10⅛ inches thick.‡
Fits wood walls 5 to 10⅛ inches thick.
NF-10L Fits brick walls 11 to 16⅛ inches thick.*
Fits brick walls 9 to 14⅛ inches thick.‡
Fits wood walls 9 to 14⅛ inches thick.

Model No.	Blade Size	Wall Plate	Dimensions, Inches — Outside Panel	Wall Opening	Shpg. Wt. Lbs.	Price Each
NF-10	10	13x13	13¾x13¾	11⅛	19	**$34.50**
NF-10L	10	13x13	13¾x13¾	11⅛	21	**34.50**
NF-10C			Chrome Center Grille			**36.50**
NF-10LC			Chrome Center Grille			**36.50**

8-INCH WALL VENTILATING FAN



Easy installation — screw driver is the only tool needed to install. Motor is unconditionally guaranteed for one year. Motor and blade removable for cleaning of inner sleeve. Motor assembly is rubber mounted.

White baked enamel grille. Brilliant stainless steel finish grille **$3.00** extra. Compact grille 10½ inches square for easy installation in close clearances.

NF-8 —Fits brick walls 7 to 12⅛ inches thick.*
Fits brick walls 5 to 10⅛ inches thick.‡
Fits wood walls 5 to 10⅛ inches thick.
NF-8L Fits brick walls 11 to 16⅛ inches thick.*
Fits brick walls 9 to 14⅛ inches thick.‡
Fits wood walls 9 to 14⅛ inches thick.

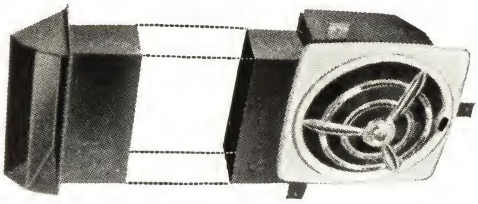
Model No.	Blade Size	Wall Plate	Dimensions, Inches — Outside Panel	Wall Opening	Shpg. Wt. Lbs.	Price Each
NF-8	8	10½x10½	13¾x13¾	9⅛	15	**$27.75**
NF-8L	8	10½x10½	13¾x13¾	9⅛	16	**27.75**
NF-8C			Stainless Steel			**30.75**
NF-8LC			Stainless Steel			**30.75**

*When outside panel is set back 2 inches.

‡When outside panel is set flush with face brick.

NuTONE VENTILATING FANS

10-INCH CEILING VENTILATING FAN



10-inch Pressure type fan especially built for this ceiling ventilator to provide maximum air delivery. Fan housing only 3 9/16 inches deep—to fit standard 2x4 inch construction. Equipped with brackets for easy attachment to ceiling timbers. Adapted for standard 3¼ x 12-inch furnace duct. Gravity anti-back-draught shutter removable from inside. Outside wall hood equipped with anti-back-draught louvre. Separate elbow available for vertical outlet installation. Motor specially designed for vertical operation. Special multi-speed switch furnished at **$5.95** extra.

White baked enamel ceiling plate, with removable white grille. Model NCF-10 will be shipped with hood unless otherwise specified.

Model No.	Blade Size	Ceiling Plate	Outside Hood	Price Each
NCF-10	10	13x13	14 1/32x5 9/16	**$34.95**
NCF-10C		Chrome Center Grille		**36.95**
C		Unit Wall Cap.....		**3.45**

*When outside panel is set back 2 inches.

‡When outside panel is set flush with face brick.

NuTONE "HEAT-A-LITE" HEATER, LIGHT AND COOLING FAN

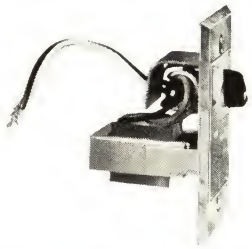


A combination of all-electric ceiling heater, overhead light and air circulator. Ideal for bathrooms, bedrooms, nurseries, recreation rooms and other small areas in the home (old or new construction), tourist camps, motels, summer cottages, trailers, defense housing, farm uses, etc.

Cat. No.	Description	List Each
	Heater and Light Only	
900	White Intake Grille with Chrome Discharge Grille	**$49.95**
901	All-Chrome Intake and Discharge Grille	**54.95**
	Heater, Light and Cooling Fan	
902	White Intake Grille with Chrome Discharge Grille	**59.95**
903	All-Chrome Intake and Discharge Grille	**64.95**

NuTONE 3-SPEED WALL SWITCH

STYLE FS-595 — FOR CEILING FANS



This NuTone combination wall switch and speed control can be used with all NuTone ceiling fans. The switch knob has four positions: off, high, medium and low. It is mounted on a wall plate to fit standard single outlet box 2½ inches deep.

Packaged 6 to a standard package. Weight standard package, 7 lbs.

Price, Style **FS-595** 3-Speed Wall Switch for Ceiling Fan.....each **$5.95**

FRESH'ND-AIRE MODEL 700 ELECTRIC HUMIDIFIER



Everyone's interested in better health — interested in protecting family and household possessions against the ravages of air that's too dry. In every home, apartment and office there is a real need for this entirely new — excitingly different Fresh'nd-Aire Electric Room Heater.

It washes, filters and freshens the air — leaves it free of harmful dirt, dust, pollen and the many irritating and dangerous impurities so prevalent in the parched, dry air of the average home, apartment and office.

What It Does!

- Adds correct amount of moisture to air.
- Protects your health and the childrens, too.
- Guards against coughs, colds, dry, cracked skin and respiratory ailments that are aggravated by parched, dry air.
- Cleans, washes and filters out dust, dirt, smoke and pollen.
- Leaves the air healthfully humidified — crystal clear.
- Keeps home, apartments, offices cleaner and more comfortable.
- Gives relief from suffering due to hay fever and asthmatic conditions due to allergies irritated by dust, dirt and pollen laden air.

Specifications

Holds approximately one and one-half gallons of water — continually re-circulates it over filter at rate of 15 gallons per hour. Washes — filters and properly humidifies 6,000 cubic feet of air per hour. Evaporates approximately one pint of water per hour (varies according to temperature of air).

Underwriters' Laboratories approved. Motor 115 volts 60 cycles, A.C. Consumes 30 watts. 13 inches wide by 11 inches high. Weight 6¾ lbs. Packed in individual shipper. Weight 10 lbs.

Price, No. **700** Humidifier.....**$39.95**
Replacement Filter Pads for No. **700**..... **3.00**

WELCH AIR-FLIGHT CIRCULATORS

MODEL 12 DELUXE CIRCULATOR



Because of its plastic design and sturdy construction this Circulator is remarkably strong and durable. The patented louver-rings, in addition to directing the flow of cooling air, completely enclose the fan blades — a perfect guard against accidents. For homes, hospitals and offices, providing cooling comfort even on the hottest and most sultry days.

1/15 H.P. shaded pole type motor; 1500 RPM; 50-60 cycles; 110-120 volts; 4500 CFM. Convenient foot-operated 3-speed switch. Motor guaranteed against mechanical or electrical defects for a full five years.

Finish: Mottled mahogany plastic top and base and harmonizing buff colored louver rings.

Model No.	Dimens., In. Blade Size	Diameter	Height	Shpg. Wt. Lbs.	Price Each
12	12	15	14	20	**$49.95**

MODEL No. 15 AIR-FLIGHT SPECIAL CIRCULATOR



In addition to its new sealed-in motor — no oiling required — this new model has the same 5-year guarantee as the pioneer Welch deluxe models — the same beauty — durability — safety and quietness — the same patented louvers and the same balanced circulation that have made its big brothers, the Models 11 and 12 the largest volume sellers in the air circulator field.

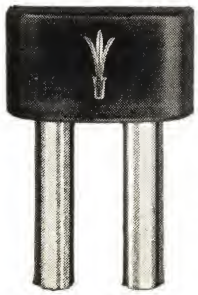
Convenient recessed 3-speed control in the top. 5 leaf fan blade; 3-speed 1450 RPM; 2800 CFM.

Finish: Rich sparkling two-tone plastic with maroon top and base and contrasting grey louver rings.

Model No.	Dimens., In. Diameter	Height	Shpg. Wt. Lbs.	Price Each
15	13½	13	15	**$36.95**

NuTONE DOOR CHIMES

DELUXE



NuTone now offers this smartly styled short-tube door chime. Two notes for front door, one note for rear. Walnut finish cover with brass tubes or white with chrome tubes. Specify finish when ordering.

Model No.	Std. Pkg.	Wt. Lbs. Each	Price Each
K-23	6	2⅛	$6.95

REGAL

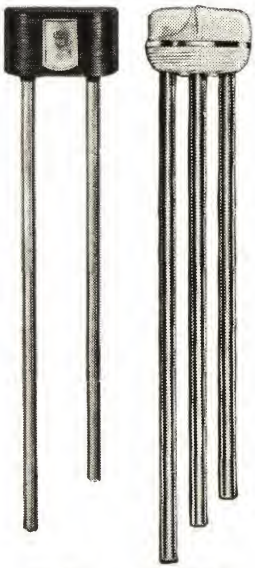
This 2-door chime has a walnut finish cover; hammered brass decoration and two long brushed brass tubes. Noiseless power unit and volume adjustment of each tube. Width 7⅞ in.; height 36⅞ in.; depth 2⅞ in.

Cat. No.	Std. Pkg.	Wt. Lbs. Each	Price Each
K-27	6	4	$9.95

CONTINENTAL

This 2-door, three long tube (center tube silent) chime is a tribute to gracious living. Ivory plastic cover, trimmed in satin Brass, blends with the "Continental's" three brass tubes. Two tones for front door — one for rear. Width 7¾ in.; height 41¾ in.; depth 3 in.

Model No.	Std. Pkg.	Wt. Lbs. Each	Price Each
K-32	6	4¾	$13.95



Regal Continental



MOUNT VERNON

Colonial, typical of the times it represents, this 2-door model in faithfully reproduced hammered brass is an exclusive, patent-protected NuTone design. With harmonious 3-tube effect, the "Mount Vernon" sounds two tones for front door, one for rear.

Width 7 in.; height 11¾ in.; depth 3¼ in.

Cat. No.	Std. Pkg.	Wt. Lbs. Each	Price Each
K-20	6	3⅛	$9.95

NuTONE DOOR CHIMES

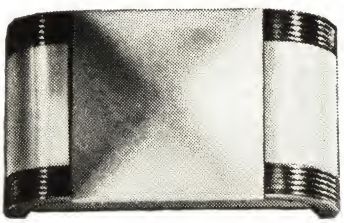
COMMANDER



Sleek, streamlined, this 2-door NuTone sounds two richly vibrant tones for front door, one for rear. Designed in lustrous plastic, the "Commander" demands attention in Ivory and satin brass tubes and trim — or White and glittering Chrome.

Model No.	Dimens., Inches Width	Height	Depth	Std. Pkg.	Wt. Lbs. Each	Price Each
K-16	7	6¾	2¾	6	2⅛	$6.95

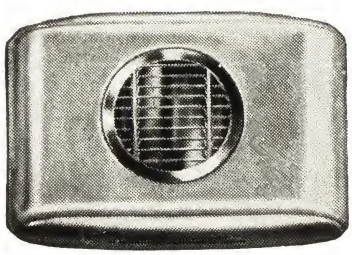
SKYLINE



Like its name, the smooth, unbroken lines of this 2-door all-plastic NuTone Chime are a joy to behold. A perfect decorative match for almost any room — rich Ivory and Brass.

Model No.	Dimens., Inches Width	Height	Depth	Std. Pkg.	Wt. Lbs. Each	Price Each
K-14	7⅝	4½	2½	6	1¾	$5.95

LEADER



Shapely, compactly made of metal, is this melodious 2-door NuTone chime. Blends well anywhere, especially in restricted kitchen or hallway spaces. Comes in Chrome louvre and baked-enamel White cover —or satin Brass and Ivory.

Model No.	Dimens., Inches Width	Height	Depth	Std. Pkg.	Wt. Lbs. Each	Price Each
K-10	7	4½	2¼	12	1⅓	$3.95

NuTONE DOOR CHIMES

CENTURY



Century

Modern Hall Clock and 8-Note Door Chime. Rich blonde mahogany or walnut cabinet. Both Telechron electric clock and NuTone chime operate on same 24v. transformer; gives new, simplified installation. Four 1⅛ inch brass tubes; selector switch to sound four or eight Westminster tones for front door — one tone, rear; different single note for third door. Complete with volume control and 24v. transformer. Width 10¾ in.; height 52⅜ in.; depth 5¼ in.

Cat. No.	Std. Pkg.	Wt. Lbs. Each	Price Each
K-48	1	15	$69.95

($4.00 Fed. Tax on clock to be paid by consumer to retailer.)

JEFFERSON

Colonial Hall Clock and Door Chime. Both Telechron electric clock and NuTone chime operate on same 24v. transformer; gives new, simplified installation. Dial matches the four 1⅛ inch gold finish tubes; selector switch to sound eight Westminster tones for front door, or only four if desired — one tone, rear; different single note for third door. Complete with volume control and 24v. NuTone transformer.

Width, 10⅞ in.; height, 57⅛ in.; depth, 5½ in.

Cat. No.	Std. Pkg.	Wt. Lbs. Each	Price Each
K-46	1	20	$79.95

($4.00 Fed. Tax on clock to be paid by consumer to retailer.)



Jefferson

JEWEL



Stunning Colonial chime — with a touch of the modern. Cover cast in one piece; has walnut finish with satin brass tubes. Two tones, front door — one tone, rear. New noiseless power unit.

Cat. No.	Width Ins.	Height Ins.	Depth Ins.	Std. Pkg.	Wt. Lbs.	Price Each
K-22	7	9	3	6	3½	$10.95

NuTONE DOOR CHIMES



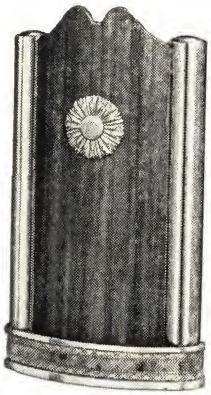
MAJESTIC

Ivory plastic cover, trimmed with brass to match the tubes. Entire mechanism and mounting engineered for quick, easy installation. Four 1⅛ inch satin-brass tubes; selector switch to sound eight Westminster tones for front door, or only four if desired—one tone, rear; different signal note for third door. Has volume control. Complete with 24v. NuTone transformer. Width 11¾ in.; height 49¼ in.; depth 5½ in.

No. K-45 same as K-44 except with Walnut wood cabinet.

Cat. No.	Std. Pkg.	Wt. Lbs. Each	Price Each
K-44	1	13¾	$49.95

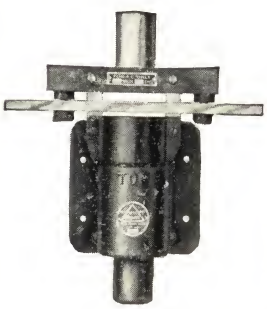
SYMPHONIC



Compact elegance in an eight-tone Westminster chime. Eight tones for front door—one tone, rear; different signal note for third door. Walnut-finish cover, brass resonator tubes, brass gallery decoration. Special brass-alloy tone bars. Selector switch gives four or eight tones as desired. Volume control. Width 8 in.; height 14 in.; depth 3¼ in. Complete with 24-volt transformer.

Cat. No.	Std. Pkg.	Wt. Lbs. Each	Price Each
K-40	1	9¼	$32.95

EDWARDS DIRECTORY CHIME

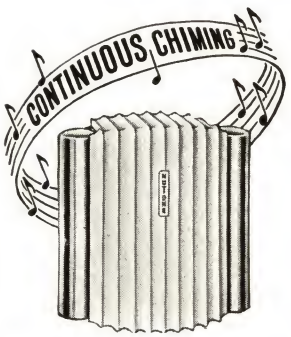


Sounds a prolonged musical call note for department store executives, hospital fire alarm signals, etc. Furnished with special wall mounting plate. Standard finish: light grey with polished nickel tone bar and resonator. Standard voltage: 24 volts D.C. and 24 volts 60 cycles. Other voltages available.

Price, No. 18 Directory Chime.....each $26.50

NuTONE DOOR CHIMES

K-18 REPEAT-A-TONE



New design for a proven 3-purpose chime. Extra signal can be used for basement or garage call. Chimes (1) a continuous sounding melody, (2) two notes, and (3) one note. White and chrome or ivory and brass. Width, 7 inches; height, 7¾ inches; depth, 2½ inches.

Cat. No.	Standard Package	Shpg. Wt. Lbs.	Price Each
K-18	6 of 1 Color	2⅝	$7.95

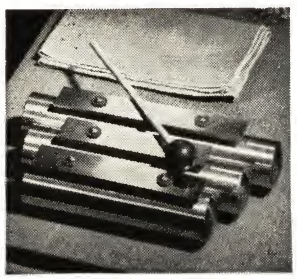
MC-300 MECHANICAL CHIME



Perfect for small homes, apartments, and G.I. projects not wired for electric chimes. Adjustable to all doors up to 2¼ inches thick. Solid brass alloy tone bar. Single loud tone, which repeats each time visitor pulls and releases knob at front door. Size: 5⅛ x 2 inches wide. Standard package, 6; unit weight 18 oz.

Price, **MC-300** Mechanical Chime .....each **$4.50**

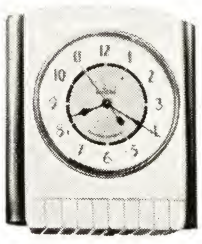
DC-595 CHIMETTE



The musical signal call that is welcome everywhere. A gift item for weddings, bridge prizes, etc. Satin-brass tubes and chime bars. Has baked lacquer finish to prevent tarnishing. Complete with ivory plastic striker. Packed in attractive gift box.

Cat. No.	Size Overall Inches	Std. Pkg.	Wt. Lbs. Each	Price Each
DC-595	8¾ x 4¼ x 2	6	2	$6.95

K-37 DOOR CHIME AND KITCHEN CLOCK



An exceptional 2-in-1 value. This handsome door chime and clock combination. Chime operates on 10 or 16 volt chime transformer for door signal. The clock plugs into any 115 volt AC wall outlet. Designed for beauty and dependability, it completes every kitchen. Large easy to read dial. Exposed chrome chime tubes. Gleaming white plastic cover.

Cat. No.	Size Overall Inches	Std. Pkg.	Wt. Lbs. Std.Pkg.	Wt.Lbs. Each	Price Each
K-37	8½x5¾x2½	6	20	4⅛	$13.95

EDWARDS FLUSHCALL LINE



A modernized line of devices to replace old-fashioned doorbells, buzzers, combinations, transformers, and push buttons. Each device fits standard switch boxes, outlet boxes and fittings and takes standard toggle or receptacle plates. No-contact design for A.C. only, assuring long life with no adjustment needed. Can be ganged with switches, receptacles, etc.

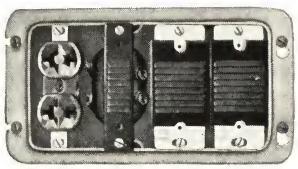


Illustration shows ideal arrangement consisting of Duplex receptacle, Powacall and audible signals which may be covered by standard plate, instead of transformer in cellar, bells high on wall and convenience outlet low on wall. Transformer takes power from same line as receptacle. Because of depth of Powacall transformer, this combination uses 2½-inch deep box. See description of Powacall below. 24 volts should be used where quantity of devices is to be operated in multiple at once.

The Ringcall

Flush bell with better tone and more carrying power.

8-10 V. A.C. No.	Std. Pkg.	Price Each	24 V. A.C. No.	Std. Pkg.	Price Each
660	6	$1.65	760	3	$2.05

The Buzacall

Flush buzzer with better tone and more carrying power. Over 100% variation in tone possible.

8-10 V. A.C. No.	Std. Pkg.	Price Each	24 V. A.C. No.	Std. Pkg.	Price Each
661	6	$1.60	761	3	$1.95

The Tucall

Flush combination bell and buzzer.

8-10 V. A.C. No.	Std. Pkg.	Price Each	24 V. A.C. No.	Std. Pkg.	Price Each
662	6	$2.60	762	3	$2.60

The Melocall

Soft single stroke for third signal, dining room-kitchen call, and similar uses.

8-10 V. A.C. No.	Std. Pkg.	Price Each	24 V. A.C. No.	Std. Pkg.	Price Each
663	3	$2.25	763	3	$2.60

Powacall



Flush transformer. Fits in second gang of standard 2½-inch deep box with other Flushcall devices described above. Acts as barrier for either outlet or switch box. Underwriters' Approved.

No.	Voltage Primary	Voltage Secondary	Std. Pkg.	Price Each
666	115, 50-60 Cyc.	10	3	$3.40

No. 664 Togelpush



Fits any standard box, takes standard toggle plate.

No.	Description	Std. Pkg.	Price Each
664	The Togelpush	6	$0.45

EDWARDS STREAMLINED DOORBELLS AND BUZZER

Beautifully streamlined for standard, modern appearance. Aluminized finish is lasting and harmonizes with any wall color. All bell movements have straight hammer rods and solid hammer balls, giving more power and smoother action on battery or transformer.

Large magnets, correctly designed phosphor-bronze springs, silver contacts and fine workmanship make these the finest, low-cost bells ever produced.

The small buzzer has an unusually powerful mechanism and is adaptable for a multitude of uses. Fully insulated, it is ideal for mounting on metal desks, metal frames, etc. Large magnet, correctly designed phosphor-bronze spring, silver contacts, make this fully enclosed buzzer a perfect complement to the new line of doorbells.



COVERED BELL AND COMBINATION

Non-adjustable, fully enclosed bell or combination. Aluminized finish, will harmonize with any wall color. Only 5¼ inches long, 3 inches wide, 1 inch deep.

The Dixie Bell

No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
720	12	6	**$1.00**

The Buzabel Combination

730	12	6	**1.60**

DIXIE BUZZER

Non-adjustable, fully enclosed. Ideal for mounting on metal desks, metal frames, etc. Aluminized finish. Only 2¾ inches long by 1¾ inches wide.



No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
725	12	2¼	**$0.85**



NUBEL—ENCLOSED BINDING POST TYPE

Enclosed binding post type bell available with 2½-inch or 4-inch gongs.

Aluminized bases and gongs. Non-adjustable.

With 2½-inch Gong

No.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
740	12	4¼	**$0.90**

With 4-inch Gong

744	3	2	**1.60**

EDWARDS BELLS AND BUZZERS

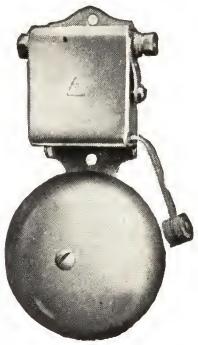
No. 156 MONITOR BELL



An entirely self-contained bell of neat appearance. The hammer-rod moves on a straight line and strikes the inside of the gong. This allows the bell to be made bug and dust-proof. 3-inch gong.

No.	6-8 V.D.C. 8-10 V. 60 Cyc.	24 V.D.C. or 60 Cyc.	Other Volts to 48 V.
156	**$3.30**	**$4.95**	**$7.70**

No. 13 LUNGEN BELL



Lungen bells have the same fine construction as Lungen buzzers. Finish, polished chrome. Phosphor-bronze springs. Contacts pure hard-drawn silver, and double locking adjustment.

8-10 V., 60 Cyc., 6-8 V.D.C.

Size In.	Price Each	Size In.	Price Each
1	**$4.10**	2½	**$4.00**
1¾	**3.80**	3	**4.10**

Other voltages on request.



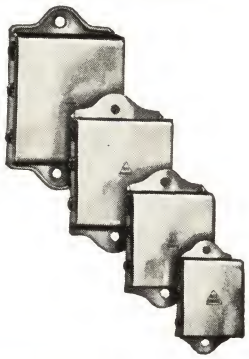
No. 15 LUNGEN BUZZER

8-10 V., 60 Cyc., 6-8 V.D.C.

Size	Dimens. Inches	Price Each
0	1½x1⅝	**$3.30**
1	2⅛x1⅞	**3.10**
2	2⅝x2⅛	**3.30**
3	3 x2½	**3.50**

Standard package 3. Other voltages on request.

No. 115 NO-CONTACT A.C. BUZZERS



Completely insulated. Convenient for metal desks, etc. Completely covered. Internal binding posts. Standard finish, polished chrome.

Standard package 3.

Size In.	Price 8-12V.	Price 24V.
1 (2⅛x1⅝)	**$2.90**	**$3.10**
2 (2⅝x1¾)	**3.10**	**3.30**
3 (3 x2)	**3.30**	**3.50**
4 (3½x2¼)	**4.50**	**4.75**

No. 55 EDWARDS BELLS



Standard Voltage

8-10 Volts, 60 Cyc., 6-8 Volts D.C.

This single magnet bell is especially designed for low cost burglar alarm and similar work.

It is of the adjustable, non-weatherproof type.

Has light grey finish with nickel gong.

Standard package, 1.

Size ..... inches	4	6
No. 55 ..... each	**$4.50**	**$5.50**

EDWARDS ECONOMY BELLS



Standard Voltage
8-10 Volts, 60 Cyc., 6-8 Volts D.C.

This is a covered, double magnet bell for low cost burglar alarm and similar work.

Adjustable. Bakelite insulation. Finish, grey. Standard package, 1.

Size ..... inches	4	6
No. **17** ..... each	**$9.50**	**$11.60**

EDWARDS ADAPTABEL

Underwriters' Approved

VIBRATING TYPE—No. 340



This new Vibrating Type Adaptabel meets every normal noise condition. For factories, offices, stockrooms, schools, and boiler rooms. Back plate easily mounted on wall or any switch box, outlet box, Condulet or Wiremold type fitting. Wires connected direct to plate. Large, convenient binding posts give plenty of working room. Slip Adaptabel on the sturdy hanger — no nuts or screws, then push Adaptabel home and fasten with exposed screw.

Size Inches	24V. A.C. 60 Cyc.	115V. A.C. 60 Cyc.	25 Cyc. or Other Voltages to 250 V.	Approx. Wt. Lbs.
4	**$20.00**	**$25.00**	**$30.00**	3¾
6	**28.50**	**33.50**	**38.50**	6
10	**37.50**	**40.00**	**50.00**	9½

Additions	4-Inch	6-Inch	10-Inch
For Full Cast Grid	**$12.50**	**$12.50**	**$15.00**
For Slotted Gong	**4.00**	**4.00**	**4.00**
For Yard Type Hood	**32.50**	**32.50**	**32.50**

For Weatherproof Installations

The standard No. 340 Adaptabel is designed, and has withstood tests, for average interior or protected exterior conditions. Underwriters' "Weatherproof Listing" or most severe conditions require a No. 348 or No. 349 gasketed aluminum back box. These boxes are drilled and tapped on the top to take ½-inch surface conduit. Bosses are also provided in the back and at the bottom which can be drilled for unusual mounting requirements.

No. **348** Cast Back Box and Gasket for 4-inch No. 340 Adaptabel **$6.00**

No. **349** Cast Back Box and Gasket for 6-inch or 10-inch Adaptabels **6.00**

For Single Stroke AC and DC Adaptabels, and Vibrating DC Adaptabels, data and prices on request.

EDWARDS SINGLE STROKE BELLS

FOR FIRE AND SIGNALING SYSTEMS



Solenoid type construction, giving a loud, clear ring. The operation is quick and precise, ideal for all coded signaling purposes. The construction eliminates springs and pivots and the life of the bell is unusually long.

The entire mechanism is under the gong. For surface conduit work a separable box is furnished with knockouts on all sides. This same box can be mounted flush and an extension cover is furnished for mounting the bell.

Single stroke bells can be operated either in series or multiple, but will be furnished for the latter unless specified.

When conduit type is ordered, flush fitting will be supplied unless otherwise specified.

For Fire Alarm Systems. Specify No. 23 for direct current; No. 24 for alternating current.

Be sure to specify voltage and whether for series or multiple operation.

For Series Operation on 115 Volts from Control Panel

Size Inches	Wt. Lbs. Each	Price Each
4	2	**$25.00**
6	4¾	**33.50**
10	9	**40.00**

EDWARDS SIREN

No. 315 SIREN



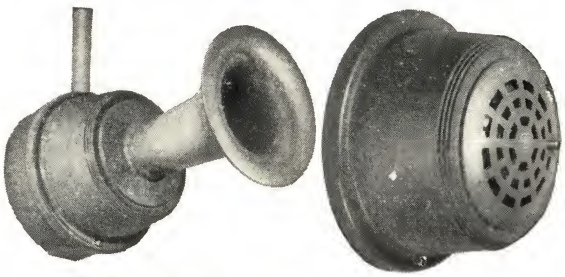
Ideal for all industrial signaling purposes (except coding) or as railroad warnings, fire or other emergency alarms. It is also used for traffic clearing, drawbridges and other institutional uses.

Has 115-volt, 60 cyc., or D.C. universal motor totally enclosed. Can be supplied for 250 or lower voltages at no additional charge if the voltage is specified. Projector is aluminum. Intake is adequately screened. Entirely weatherproof. Has conduit connection and swivel bracket to permit mounting at any angle. Standard finish, Red Duco. Weight, 15½ pounds. Standard package 1.

Price, No. **315** Siren ..... each **$85.00**

EDWARDS ADAPTAHORN

Listed by Underwriters' Laboratories, Inc.



Projector Type
7" diam. 10⅛" long

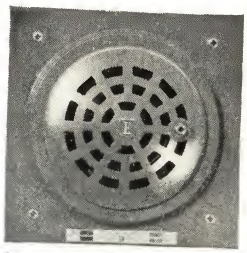
Grille Type
7" diam. 4" deep

The Adaptahorn is designed to give louder results from less current. Has the same unique sealing of the mechanism and adaptor mounting as the Edwards Adaptabel. Large binding posts for easier front-connection of wires. Standard finish, light grey.

Cat. No.	24 V.A.C. 60 Cyc.	115 V.A.C. 60 Cyc.	25 Cyc. or Volts to 250 Volts, A.C.	Approx. Weight
372	**$21.00**	**$21.00**	**$25.00**	6¾
374	**18.50**	**18.50**	**23.00**	5¾

No. **349** Cast Back Box and Gasket for Underwriters' Listed weatherproof installation is drilled and tapped on top to take ½-inch conduit. Bosses are also provided in the back and at the bottom which can be drilled on the job for unusual mounting requirements. Weight, 2 lbs.....price **$6.00**

EDWARDS FLUSH HORN

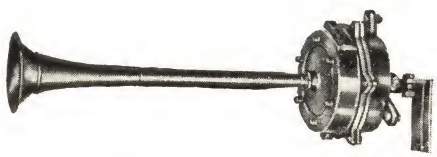


This flush horn has the same characteristics and mechanism as the Adaptahorns. Size: 6½x6½ inches. Wallcut size: 5⅝ x5⅝x3 inches deep. Weight, 3¾ lbs.

Prices include special wall box.

No.	Description	Price
370	25 or 115 volts, A.C. (specify).....	**$30.00**
370	25 Cyc. or Volts to 250 Volts, A.C.	**35.00**

No. 5420 WATERTIGHT SCREECH HORN



Louder than the ordinary horn. Approx. 115 Decibel rating at 3 feet indoors. Has extended steel projector and cast base. Base is fastened to bracket for wall or ceiling mounting. Swivel action of bracket permits mounting in any desired direction.

For 115-volt D.C. or 60 cycle operation.

Price, No. **5420** A.C. ..... each **$60.00**
No. **5421** D.C. ..... each **75.00**

CROUSE-HINDS CONDULETS

TYPE ESR BELL SIGNAL CONDULETS

Explosion-Proof and Dust-Tight
Class I, Group D; Class II, Groups E, F, and G; and Class III



Furnished with either 6, 8, or 10-inch diameter gong and with vibrating or single stroke hammer.

25 to 60-cycle A.C.

Size hub—¾ inch.

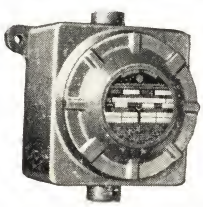
Type ESR Bell Signal Condulet for A.C.*

Nom. Volts	Voltage Range	Loudness Rating: Decibels at Six Yards	Loudness Rating: ASA Units	Dia. Bell	Cat. No.	List Each
Vibrating Hammer						
12	11 to 13	88.5	33600	6″	ESR-2675	$84.00
24	22 to 26				2674	84.00
48	44 to 52				2673	84.00
115	104 to 126				2672	70.00
230	207 to 253				2671	70.00
12	11 to 13	92.5	47000	8″	2695	85.25
24	22 to 26				2694	85.25
48	44 to 52				2693	85.25
115	104 to 126				2692	71.25
230	207 to 253				2691	71.25
12	11 to 13	92	45000	10″	2615	86.00
24	22 to 26				2614	86.00
48	44 to 52				2613	86.00
115	104 to 126				2612	72.00
230	207 to 253				2611	72.00
Single Stroke Hammer						
12	11 to 13	88.5	33600	6″	2665	84.00
24	22 to 26				2664	84.00
48	44 to 52				2663	84.00
115	104 to 126				2662	70.00
230	207 to 253				2661	70.00
12	11 to 13	92.5	47000	8″	2685	85.25
24	22 to 26				2684	85.25
48	44 to 52				2683	85.25
115	104 to 126				2682	71.25
230	207 to 253				2681	71.25
12	11 to 13	92	45000	10″	2625	86.00
24	22 to 26				2624	86.00
48	44 to 52				2623	86.00
115	104 to 126				2622	72.00
230	207 to 253				2621	72.00

TYPE ECT TRANSFORMER CONDULETS

Explosion-Proof, Dust-Tight, and Weather Resistant (Raintight)

Class I, Group D (NEMA Type VII); Class II, Groups E, F, and G; and Class III (NEMA Types IXA, IX, V, and III)



Furnished with 50-133-cycle transformers. 25 and 50-volt-ampere transformers are provided with tapped primaries for 230, 460, or 575 volts and 115-volt secondaries. 75 to 750-volt-ampere transformers, inclusive, are provided with single voltage primaries for either 230, 460, or 575 volts and 115-volt secondaries. The voltage required must be specified.

Transformers for other secondary voltages can be furnished. Information on request.

Volt-Amperes (50-133 Cycles)	Size Hub	Cat. No.	List Each
25	¾	**ECT211**	**$29.60**
50	¾	**ECT215**	**50.00**

*Information on D.C. bell signals upon request.

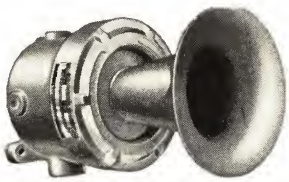
CROUSE-HINDS CONDULETS

TYPE ETH HORN AND SIREN SIGNAL CONDULETS

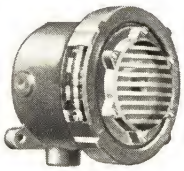
Explosion-Proof and Dust-Tight

Class I, Group D; Class II, Groups E, F, and G; and Class III

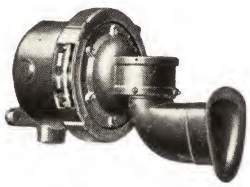
Adjustable projectors may be rotated in a horizontal plane through 180 degrees to direct the sound as desired.



Single Projector Non-Adjustable



Grill (A.C. Unit Shown)



Single Projector Adjustable (A.C. Unit Shown)



Siren Signal

Size hub—¾ inch.

Standard Volume Horn Signal

Nom. Volts	Voltage Range	Nom. Watts	Decibels at 6 Yards	Loudness Rating ASA Units	Cat. No.	List Each
Single Projector Non-Adjustable—50 to 60 Cycle A.C.						
115†	105 to 125	33	99	81000	ETH-2703	$75.00
230	207 to 253	32.5	100	88000	ETH-2702	75.00
High Power Horn Signals						
Grill—50 to 60 Cycle A.C.†						
115	104 to 126	49	101	97000	ETH-2313	90.00
125	113 to 138	30	99	81000	ETH-2413	110.00
Single Projector Adjustable—50 to 60 Cycle A.C.†						
115	104 to 126	49	101	97000	ETH-2323	95.00
125	113 to 138	30	99	81000	ETH-2423	115.00
Single Projector Adjustable—D.C.						
125	113 to 138	30	99	81000	ETH-2423	115.00
250	225 to 275				ETH-2421	115.00
Siren Signal						
A.C. or D.C. (Universal Motor)						
115	104 to 126	195	108	180000	ETH-2603	300.00

†25-40 cycle range can be supplied at no additional charge. Add suffix S225 to the catalog number.

FEDERAL EXPLOSION-PROOF SIGNALS

FOR SERVICE IN HAZARDOUS LOCATIONS



Federal Explosion-proof Signals meet the rigid specifications of the Underwriters' Laboratories for installation in hazardous locations. These units have innumerable applications in refineries, grain elevators, mines, arsenals, tankers, and similar places where dusts, vapors, or gasses, create an explosion hazard, and the use of ordinary electric signals is considered too dangerous.

These signals are extremely rugged. Housings are constructed of non-corrodible materials. Installation is simple. The signals are sealed and wires extended to a splicing condulet which is attached to the housing with a close nipple. The condulet is tapped for ¾ inch conduit.

Available in any voltage 6 to 250, but definite voltage must be specified. Mounting diameter between centers of holes in mounting lugs is 6 inches. Length of models listed is 16½ inches. Lacquer finish.

Model	Current	Cycles	Watts	Type	Shpg. Wt. Lbs.	Price Each
30X	AC	60	20	Standard	11	**$46.75**
32X	AC	60	50	Hi-Power	11	**59.00**
42X	DC	....	30	Hi-Power	11	**71.50**

The Federal "Hi-Power" Explosion-proof Horns are similar in size and general specifications to their respective Standard models, but produce twice the sound output. The tone is also rougher, and better penetration, as well as greater range, is the result.

FEDERAL INDUSTRIAL BELLS

VIBRATING AND SINGLE STROKE



A superior bell for all purposes. Stronger, slower impulses assure maximum sound output. Standard models are weatherproof, and will be furnished unless otherwise specified.

Optionally available, if specified, with plug-in feature for surface or concealed conduit mounting, for interior use. No extra charge for these optional features.

Standard housings tapped for ½-inch conduit. Available for all standard voltages from 6 to 250, any cycle ac, or for dc. Definite electrical requirements must be specified.

Vibrating Bells

Model	Current	Size Ins.	Shpg. Wt. Lbs.	Price Each 9V	24V	115V	Other Voltages
306	AC	6	6¼	.....	**$28.50**	**$33.50**	**$38.50**
406	DC	6	6¼	**$28.50**	**30.00**	**33.50**	**38.50**
310	AC	10	8½	.....	**40.00**	**45.00**	**50.00**
410	DC	10	8½	**40.00**	**42.50**	**45.00**	**50.00**
Single Stroke Bells							
106	AC	6	6¼	.....	**28.50**	**33.50**	**38.50**
206	DC	6	6¼	**28.50**	**30.00**	**33.50**	**38.50**
110	AC	10	8½	.....	**40.00**	**45.00**	**50.00**
120	DC	10	8½	**40.00**	**42.50**	**45.00**	**50.00**

FEDERAL ELECTRIC SIRENS

FEDERAL VERTICAL SIRENS



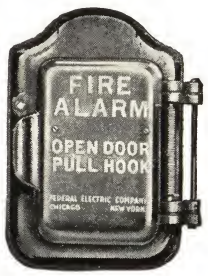
5 H.P. Federal Siren

Vertical general alarm and code sirens provide effective signals for industries and municipalities. The vertical design distributes the sound equally in all directions over a radius of from ¾ to 3 miles. Grease sealed ball bearings and heavy duty construction assure maximum durability and performance. The heavy galvanized sheet metal housing makes the siren completely weatherproof but does not muffle tone.

Large sirens should be operated through a remote control to which any number of push buttons, or pull lever boxes may be connected.

Siren No.	H.P.	Voltage	Motor Current	Cycle	Phase	Shpg. Wt.	Price Each
2	2	110–220	Univ.	Any	1	90	**$250.00**
3	3	220–440	AC	60	3	385	**385.00**
3	3	220	AC	60	1	450	**475.00**
5	5	220–440	AC	60	3	485	**450.00**
5	5	220	AC	60	1	505	**525.00**
7	7½	220–440	AC	60	3	515	**500.00**
7	7½	220	AC	60	1	525	**575.00**

FIRE ALARM BOXES (Pull Lever Type)



General Fire Alarm Box. Pull Lever Type

The Federal Fire Alarm Box automatically sounds the siren up and down the scale a predetermined number of times and then cuts out at the conclusion of the alarm. Pulling down the lever winds a clockwork mechanism which rotates a cam (or code wheel). This cam opens and closes the circuit a given number of times on each revolution or round. The box is set at the factory, usually to give two or three blasts per round. It may be quickly adjusted in the field to repeat this signal two, three, or four times, as desired. Special signals can be blown by use of the telegraph key in the box.

Where fire alarm boxes are to be mounted outside, exposed to the weather, the weatherproof type is recommended.

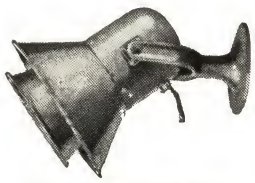
Controls

Description	
Remote Control for No. 2 Siren	**$30.00**
Remote Control for No. 3 Siren	**40.00**
Remote Control for No. 5 or No. 7 Siren	**60.00**
Push Button Switches	**5.00**
Bush Button in break glass weatherproof box	**20.00**
Fire Alarm Box (as illustrated)	**55.00**
Fire Alarm Box, weatherproof	**80.00**
Standard General Alarm Control	**45.00**
Predetermined (auto. stop) G. A. Control	**65.00**

Specify voltage and type of current in ordering Controls.

FEDERAL ELECTRIC SIRENS

TYPES "A" AND "L" SIRENS



Type A Standard Siren

An excellent signal wherever electricity is available. High-speed, ⅓-horsepower, grease-sealed, ball-bearing motor produces powerful tone. Entire assembly is protected by weatherproof housing. Equipped with swivel bracket for any mounting. Length overall 17 inches, horn diameter 10 inches. Any specified voltage from 6 to 110 AC. or D.C. Shipping weight 15 pounds.

Price, Standard Type A Siren.....each **$60.00**

The new Model L Siren, similar to the Type A, but more powerful and with deeper tone. Designed for extremely heavy duty services, especially on higher voltages. Length overall 20 inches. Diameter 11½ inches. Available for 110, 220, or 250 volts, AC or DC. Price..... **$75.00**

Type A Weatherproof Code Siren produces short, sharp code blasts. Coding accomplished by closing sound ports, not by braking. Two or more code sirens may be connected for synchronous operation. Mechanical details similar to Standard Type A. 110 volts.

Price, Type A-Code Siren.....each **$90.00**

FEDERAL SIGNAKALL

Electrically Actuated—Completely Automatic



The Federal Signakall will initiate 30 different selected code signals, repeating until shut off. The dial may be quickly set, and tripping a switch starts the coding. Its 110 volt, 60 cycle electric operation is independent of the current of the signal circuit. Requiring a minimum of space, it may be used with existing horn, siren, bell, or chime, system, or may be the nucleus of a complete modern Federal system. Indispensable to busy offices, factories, institutions, schools, mines, camps and stores. Relieves held-up telephone lines, reduces switchboard traffic, and speeds locating the desired party. Shipping weight, 4 pounds.

Where the number of signals in the circuit raises the power load above 500 watts a master relay is necessary. The voltage and type of current upon which the signal system operates should be specified in ordering a relay.

Price, Federal Signakall.....each **$85.00**
Relay for above.....each **20.00**

FEDERAL ELECTRIC HORNS

FEDERAL RESONATING HORNS



A new and radically different electric horn. Its powerful, pulsating, trumpet-like tone is pleasant but penetrating. Will overcome unusually high noise levels. Weatherproof, watertight, and non-corrodible. Available for any specified voltage from 6 to 250. Housing tapped for ½-inch conduit. Has adjustable mounting bracket. Length overall, 20½ inches.

Cat. No.	Voltage	Current	Cycle	Shpg. Wt. Lbs.	Price Each
55	24 to 250	AC	25–60	11	$60.00
56	6 to 250	DC	.....	11	60.00

STANDARD VIBRATORY HORNS



Single Projector Type

Federal vibratory horns are weatherproof and watertight. They are constructed of non-corrodible materials and are for use outdoors as well as indoors. Standard horns are sufficiently loud to overcome most noise levels.

Available in any specified voltage from 6 to 250 AC or DC.

Alternating Current Cat. No.	Alternating Current Price Each	Description	Direct Current Cat. No.	Direct Current Price Each
30-A	$17.00	Grille Front	40-A	$20.50
30	22.75	Single Projector	40	26.25
50	30.25	Double Projector	51	33.75

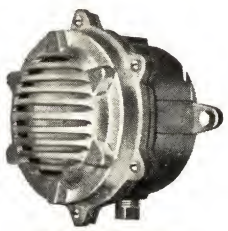
INTERIOR TYPE VIBRATORY HORNS

Similar in appearance and performance to the standard horns listed above, but non-weatherproof for interior use.

Alternating Current Cat. No.	Alternating Current Price Each	Description	Direct Current Cat. No.	Direct Current Price Each
35	$18.75	Single Projector	45	$22.50
36	26.25	Double Projector	46	30.00

HIGH POWER VIBRATORY HORNS

Employ the same high quality materials and design as the standard units. They are excellent for the more noisy locations, having about twice the volume of ordinary horns. Like the standard horns, are available with grille front, single or double projector, and in any specified voltage from 6 to 250 AC or DC.



With Grille Front

Alternating Current Cat. No.	Alternating Current Price Each	Description	Direct Current Cat. No.	Direct Current Price Each
31	$18.50	Grille Front	41	$23.00
32	25.00	Single Projector	42	29.00
33	33.50	Double Projector	43	37.00

FLUSH TYPE HORNS

All grille front Standard and High Power Models are also available for flush mounting at a slightly higher price. Ask for literature.

FEDERAL MOTOR DRIVEN HORNS



Type Nos. 60 or 61



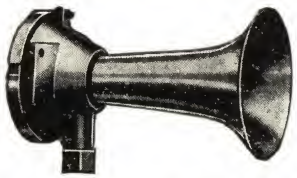
Type Nos. 20 or 21

These horns are clear and vibrant in tone, providing a pitch so distinctly different that they gain instant recognition. They are especially recommended for noisy locations. They are properly gasketed to be waterproof and are extremely rugged. Housing is tapped for ½-inch conduit. Motor driven horns are not recommended where rapid code signals are required.

Rating: A.C. Horns — 110-220-250 volts, 25 to 60 cycles. D.C. Horns — 24-110-220-250 volts.

Type	Projector	Current	Watts	Overall Dimens.	Wt. Lbs. Net	Wt. Lbs. Shpg.	Price Each
20	Single	AC	55	14¼x6¼	11½	13	$60.00
21	Single	DC	55	14¼x6¼	11½	13	65.00
60	Double	AC	55	19¾x6¼	11½	15	65.00
61	Double	DC	55	19¾x6¼	11½	15	70.00

FEDERAL COMPRESSED AIR HORNS



Model No. 6-H

For industries and municipalities, wherever a loud distinctive general alarm or code signal is desirable.

For short codes or prolonged alarms, Federal air horns are ideal. Each successively larger whistle has a deeper and more powerful tone. Projectors are specially machined cast bell bronze. Horns are available for specific pressures ranging from 15 pounds upward.

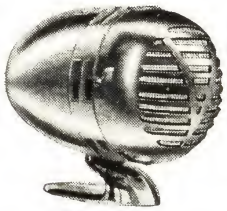
Diaphragms of special metal will last almost indefinitely at proper working pressure. Hand valves or electric valves also are available at prices depending on current and pressure characteristics required.

Numerals in Model Nos. indicate diameter of diaphragm. Letters H, M, or L indicate high, medium or low pitch. For example, Model 10-L is a 10-in. diaphgram low pitch horn, etc.

Model No.	Frequency in CPS	Length Overall Ins.	Pipe Size Ins.	Shpg. Wt. Lbs.	Price Each Horn	Price Each Hand Valve	Price Each Elec. Valve
Screw Type Connection							
3-H	725	4¾	⅜	4	$30.00	$7.50	$18.00
3-M	420	6½	⅜	5	37.50	7.50	18.00
3-L	350	12½	⅜	6	45.00	7.50	18.00
4-H	470	7½	½	7	40.00	10.00	25.00
4-M	380	11	½	12	65.00	10.00	25.00
4-L	290	14½	½	14	80.00	10.00	25.00
6-H	310	11½	¾	20	100.00	12.50	45.00
6-M	255	15	¾	22	120.00	12.50	45.00
6-L	190	18½	¾	25	135.00	12.50	45.00
Flange Type Connection							
8-H	240	14½	¾	50	185.00	12.50	45.00
8-L	170	21½	¾	60	275.00	12.50	45.00
10-H	200	16	1	60	225.00	15.00	75.00
10-L	125	32	1	120	300.00	15.00	75.00

Valves are available for any common voltage in D.C. from 6 to 250 volts; for 60-cycle A.C. in 24, 110, 208, 220, and 240 volts; and for 25-cycle A.C. on 110, 220, and 440 volts.

FEDERAL VEHICLE SIRENS

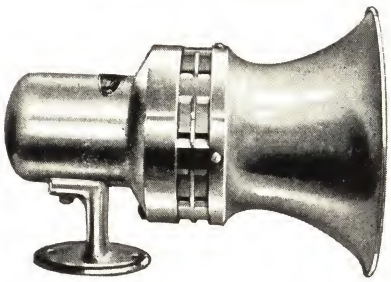


MODELS O AND V SIRENS

Low priced high quality sirens for volunteer firemen, deputies, coroners, etc. Models O and VG are alike except in finish. Model VL has powerful flashing red beam light similar in appearance to Model W. All models 4⅞ inches diameter. Choice of 6 or 12 volts.

Model	Finish	Dimens., In. Length	Height	Net Wt. Lbs.	Price Each
O	Lacquer	7	5¾	5½	$21.00
VG	Chrome	7	5¾	5½	23.00
VL	Chrome	8½	6	5½	32.00

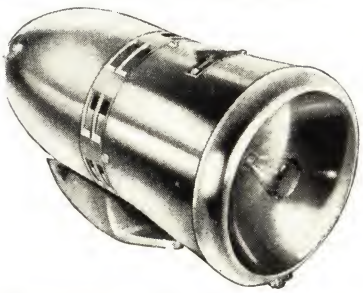
MODEL E SIRENS



The most famous vehicle siren. Conservative in price and appearance, but packed with quality and performance. Available with projector or flat grill. Rotor diameter 5½ inches. Choice of 6 or 12 volts.

Model	Description	Dimens., Inches Length	Height	Price Each
EG	Grill	8½	7½	$45.00
EP	Projector	12½	8¾	50.00

MODEL W SIRENS



Similar in capacity and performance to the Type E sirens, the "W" models are streamlined as well as chrome plated. Choice of grill or light. 6 or 12 volts. Type WLR has a light in rear as well as front. WF mounts in center of Ford radiator grill.

Model	Description	Dimens., Inches Length	Height	Price Each
WG	Grill	10	7	$50.00
WL	Light	13½	8	60.00
WLR	Rear Light	15	8	67.50

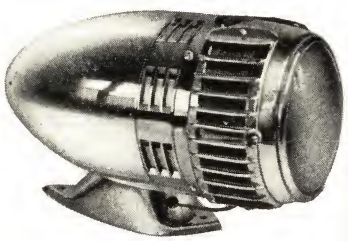
MODEL X SIRENS

Like the Model W, but constructed with a cast aluminum weatherproof manifold. The only truly weatherproof siren. With or without light. Choice of 6 or 12 volts.

Model	Finish	Dimens., Inches Length	Height	Price Each
XG	Black Enamel	14	8	$60.00
XL	Black Enamel	14	8	70.00

FEDERAL VEHICLE SIRENS

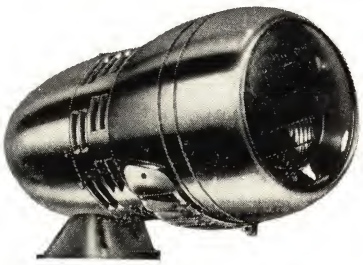
MODELS 28, 66, AND 67 SIRENS



Above average in size and power. For heavy duty service on police cars, fire trucks, or ambulances. The Model 28 is not streamlined or chrome plated. The No. 67 incorporates the Propello-Ray moving light. Choice of 6 or 12 volts. All are 7 inches in diameter.

Model	Description	Dimens., Inches Length	Height	Price Each
28	Underhood	9½	8	$ 65.00
66G	Grill	11	8	75.00
66L	Light	15	8	85.00
67	Propello-Ray	17	8½	115.00

MODELS 76, 77, AND 78 COASTER SIRENS



Special free wheeling clutch assembly allows sirens to coast for almost two minutes. Also are double tone models. Sound like two different sirens blowing simultaneously. An electric brake to stop coasting is optional. Other features like the 66 and 67 described above. Choice of 6 or 12 volts.

Model	Decription	Dimens., Inches Length	Height	Price Each
76	Underhood	11	8	$100.00
77G	Grill	12	8	110.00
77L	Light	16	8	120.00
78	Propello-Ray	17	8½	135.00

For same models with electric brake, add **$10.00.**

MODELS C-4, C-5 AND C-6 SIRENS



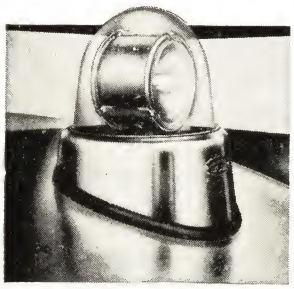
The loudest and most powerful vehicle sirens. Eight-inch rotors produce deep powerful roar and coast almost three minutes. Superbly styled and chrome plated. Electric brake optional. Choice of 6 or 12 volts.

Model	Description	Dimens., Inches Length	Width	Price Each
C-4	Underhood	11	9	$105.00
C5G	Grill	12	9	115.00
C5L	Light	16	9	125.00
C-6	Propello-Ray	17	9	140.00

For same models with electric brake, add **$10.00.**

FEDERAL VEHICLE SIRENS

BEACON RAY LIGHT

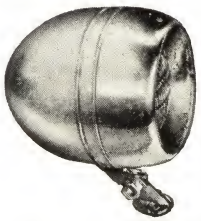


Brilliant intense spotlight beams mounted back to back rotate 360 degrees horizontally like a lighthouse. Protect front, sides and rear of vehicle whether it is moving or standing. Warns all points of the compass.

Mechanically simple. All moving parts enclosed. Weatherproof. Easy to install. Model also available for pipe mounting on open cab trucks. Also available with quick-demountable bracket. Unit is 10 inches in diameter.

Model No.	Description	Height Inches	Price Each
17	Regular Model	11	$75.00
17A	Open Cab, Pipe Mounting	13	80.00
17B	Demountable Bracket	14	85.00

PROPELLO-RAY LIGHT



Rotates a blade of light (like an airplane propeller). Positive direct drive. No external moving parts. Red, blue or amber lenses optional. Demountable model available if specified. Special model for mounting in center of Ford grill available. Seven inches in diameter.

Model	Description	Height Inches	Price Each
19	Regular Model	9	$55.00
19F	Ford, Grill Mounting	7	55.00

SCATTER RAY LIGHT



A flashing 360-degree light ideal for emergency vehicles, snow plows, etc. Red, blue or amber optional. Special prismatic lens and 50 candlepower bulb make this a stellar value. Complete with flasher.

Price, Model **BR-2** Scatter Ray Light.....**$15.00**

All Federal Lights are priced complete with Switches and Cable.

FOR YOUR ADDITIONAL REQUIREMENTS—SEE OUR APPLIANCE AND HOUSEWARES CATALOG

RITCHIE'S LOCK-SEAM SPEAKING TUBES

SPEAKING TUBE



Made in 29-inch lengths only.

Cat. No.	Size of Tube In.	Crate Qty., Feet	Price Per 1000 Feet
721	1	1,000	$60.00

ROUND ELBOWS



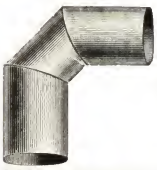
Cat. No.	Size of Tube, In.	Price Per 100
722	1	$24.00

SQUARE ELBOWS



Cat. No.	Size of Tube, In.	Price Per 100
723	1	$11.20

LOBSTER-BACK ELBOWS



Cat. No.	Size of Tube, In.	Price Per 100
724	1	$16.00

ONE-EIGHTH BEND ELBOWS



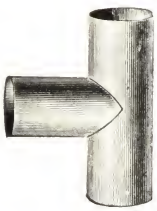
Cat. No.	Size of Tube, In.	Price Per 100
725	1	$11.20

COUPLERS



Cat. No.	Size of Tube, In.	Price Per 100
726	1	$8.00

TEES



Cat. No.	Size of Tube, In.	Price Per 100
727	1	$28.00



WALL TUBES

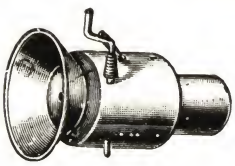
Two foot flexible wall tubes, complete with whistle and flanged collar.

Cat. No.	Size of Tube, In.	Price Each
728	1	$8.00

MOUTH PIECE



Cat. No.	Size of Tube, In.	Finish	Price Per Doz.
731	1	Nickeled	$8.00



WHISTLE
Plain or Indicator

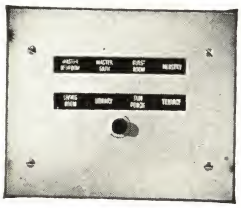
Cat. No.	Size of Tube, In.	Finish	Price Per Doz.
733	1	Nickeled	$11.20

COPPERED STAPLES

Cat. No.	Size In.	Price Per Lb.
734	1x2	$0.80

EDWARDS ANNUNCIATORS

No. 672 FLUSH TYPE ANNUNCIATORS



All metal case. Flush types can be completely wired before face plate is installed. Standard finish, white enamel. Any other spray finishes, add 20 per cent.

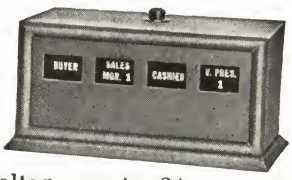
12 volt, 60 cyc. operation with buzzer signal standard. Any A.C. or D.C. voltage up to 48 can be supplied.

No. of Drops	Wall Cut Inches Hght.	Wdth.	Manual Reset	No. of Drops	Wall Cut Inches Hght.	Wdth.	Manual Reset
4	4⅝	5⅞	**$27.50**	16	6¼	7⅞	**$72.00**
8	4⅝	5⅞	**39.00**	20	7⅞	7⅞	**90.00**
12	4⅝	7⅞	**56.00**	24	7⅞	7⅞	**105.00**

For each additional 6 drops, add.....**$40.00**

Depth 3 inches for all sizes.

No. 673 DESK TYPE ANNUNCIETTES



All metal cases. Small and compact. Standard finishes — mahogany, walnut or oak grain, as specified.

8-12 volt A.C. operation with buzzer signal standard.

Any A.C. or D.C. voltage up to 24, no extra charge. Furnished with cord and connector.

No. of Drops	Dimens., In. Hght.	Wdth.	Price Each	No. of Drops	Dimens., In. Hght.	Wdth.	Price Each
2	2½	4	**$45.00**	6	2½	7	**$80.00**
4	2½	5	**65.00**	8	2½	9	**100.00**

For each additional 6 drops, add.....**$50.00**

Depth, 2⅝ inches for all sizes.

No. 130 ELEVATOR ANNUNCIETTES



All metal case, black enameled finish. 8-12 volt A.C. operation with buzzer signal standard. Any A.C. or D.C. voltage up to 24, no extra charge.

No. of Drops	Dimensions No. 130 Height	No. 130 Width	No. 130D Height	Price Each No. 130	130D Up and Down
3	7⅜	2½	--------	**$35.00**	----------
4	7⅜	2½	--------	**37.00**	----------
6	9¾	2½	7⅜	**44.50**	**$50.00**
8	12¼	2½	7⅜	**52.00**	**62.00**
10	14¾	2½	10⅛	**59.00**	**70.00**
12	17¼	2½	10⅛	**67.00**	**80.00**

Larger sizes, add **$8.00** per drop.

Width 4 inches on all sizes of No. 130-D listed.

Depth, 2½ inches.

EDWARDS ANNUNCIATORS

SURFACE TYPE ANNUNCIETTE

No. 82 — MANUAL RESET



New Surface Annunciators that are much smaller and neater than old fashioned types.

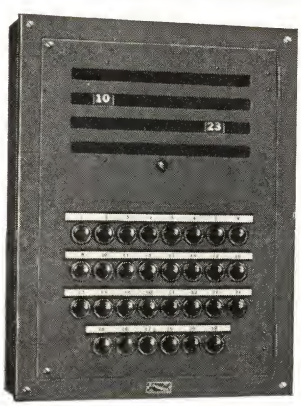
Electro-manual types have magnet reset mechanism. May be actuated from remote places. Ideal for multiple operation or remote control.

No. of Drops	Dimensions, Inches Height	Width	Depth	Price Each
4	4⅜	5¼	2½	**$22.00**
8	4⅜	5¼	2½	**34.00**
12	5	7 3/16	2½	**50.00**
16	7 3/16	7 3/16	2½	**65.00**
20	7 3/16	7⅞	2½	**84.00**
24	7 3/16	8⅜	2½	**100.00**

For each additional 6 drops, add.....**$40.00**

RETURN CALL ANNUNCIETTES
No. 410 SURFACE TYPE—HAND RESET

Standard Voltage, 8-12 Volts A.C



Used in hotels, institutions, etc., for the purpose of calling the room and receiving acknowledgment from the room that the call has been heard, or vice versa.

Designed to eliminate the large number of wires necessary if the standard annunciator, bells and pushes are used. Presents reduction in size without affecting clearness of indication.

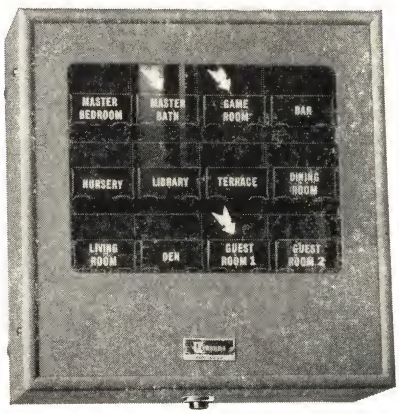
All metal case, surface type, in light gray, mahogany, walnut, oak or any solid spray finish.

No. of Drops	Arrangement Across	Down	Dimensions, Inches High	Wide	Deep	Price Each
25	9	3	14½	13½	3¼	**$360.00**
30	8	4	16¾	12½	3¼	**410.00**
36	9	4	16¾	13½	3¼	**465.00**
42	11	4	16¾	15½	3¼	**540.00**
49	10	5	19	14½	3¼	**610.00**
56	12	5	19	16½	3¼	**680.00**

For each additional drop, add **$9.00** to list. For flush type, prices on application.

EDWARDS ANNUNCIATORS

No. 403 SURFACE TYPE—ELECTRIC RESET

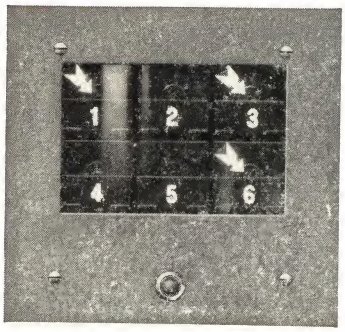


An all metal case of pleasing symmetrical design. The new No. 4 Drop used in these annunciators uses less current and gives a far better indication than any drop heretofore manufactured. The current consumption of the drop both for indicating and resetting is far below the average. The audible signal is a new type double adjustment buzzer. Reset buttons are furnished on case for every 16 drops.

Standard finish is light grey. Requires 16 volts D.C. or 24 volts A.C. at the annunciator.

No. Drops	Arrangement Across	Arrangement Down	Dimensions, Ins. High	Dimensions, Ins. Wide	Dimensions, Ins. Deep	Wt. Lbs. Each	*Price Each
4	2	2	6⅛	5⅛	3	3¾	**$39.00**
8	4	2	6⅛	8⅛	3	5½	**56.00**
12	4	3	8⅛	8⅛	3	7	**75.00**
16	6	3	8⅛	11⅛	3	8¼	**100.00**
20	5	4	10¼	9⅝	3	10	**125.00**
24	6	4	10¼	11⅛	3	12	**150.00**
For each additional 6 drops, add.....							**50.00**

No. 409 FLUSH TYPE—ELECTRIC RESET

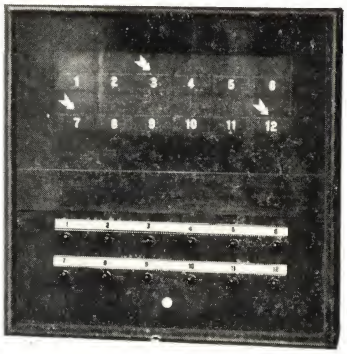


No. Drops	Arrangement Across	Arrangement Down	Dimensions, Ins. High	Dimensions, Ins. Wide	Dimensions, Ins. Deep	Wt. Lbs. Each	*Price Each
4	2	2	7	5⅜	3½	4¼	**$65.00**
8	4	2	7	8⅜	3½	6½	**85.00**
12	4	3	9⅛	8⅜	3½	7¾	**105.00**
16	6	3	9⅛	11⅜	3½	10½	**130.00**
20	5	4	11¼	9⅞	3½	11	**150.00**
24	6	4	11¼	11⅜	3½	12½	**180.00**
For each additional 6 drops, add.....							**50.00**

*For automatic reset feature, No. 403 and 409 annunciators, no extra charge. Prices include steel wall box.

EDWARDS ANNUNCIATORS

No. 415 RETURN CALL—ELECTRIC RESET



Surface type, metal case; standard finishes, light grey, mahogany, walnut, oak or any solid spray finish, as specified. Requires 8 volts D.C. or 16 volts A.C. at the annunciator. For the same purpose and use as No. 410 annunciator, but with electric reset.

Standard arrangement is one reset for every 16 drops. In the hand reset annunicator all drops that are down are reset, and the electric reset annunicator allows the individual resetting of each drop where desired.

*No.of Drops	Arrangement Across	Arrangement Down	Dimensions, Ins. High	Dimensions, Ins. Wide	Dimensions, Ins. Deep	Wt. Lbs.	Price Each
25	9	3	20¼	20	3¾	23	**$360.00**
30	10	3	20¼	21½	3¾	25	**410.00**
36	9	4	23¾	20	3¾	28	**465.00**
42	11	4	23¾	23	3¾	33	**540.00**
49	10	5	27¼	21½	3¾	37	**610.00**
56	12	5	27¼	24½	3¾	41	**680.00**
64	13	5	27¼	26	3¾	46	**765.00**
72	15	5	27¼	29	3¾	52	**835.00**
81	14	6	30¾	27½	3¾	57	**925.00**
90	15	6	30¾	29	3¾	62	**1010.00**
100	15	7	34¼	29	3¾	69	**1100.00**

*For more than 100 drops add to list price, per drop, **$12.00.** General Call Button, prices upon application (not made in intermediate sizes). Equipped with flush type cases, prices on application.

RAILWAY ANNUNCIATORS
No. 813 SURFACE TYPE



A small and shallow design for the limited space of Pullman and similar railway cars. Flush type is particularly adapted to modern streamline design cars. Furnished standard with 3-inch No. 156 Monitor Bell. Adapted for chime signal instead of bell. Flush type may be supplied. Standard finish: grey, grained or solid spray finishes if specified. 8-12 volts, 60 cycles, or 6-8 volts D.C.

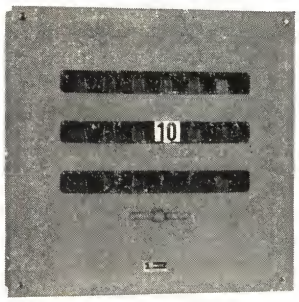
No. of Drops	Arrangement Across	Arrangement Down	Dimensions, Ins. High	Dimensions, Ins. Wide	Dimensions, Ins. Deep	Wt. Lbs.	Price Each
4	4	1	4 1/16	6 9/16	2 13/16	3	**$40.00**
6	6	1	4 1/16	8 9/16	2 13/16	3¼	**50.00**
8	8	1	4 1/16	10 9/16	2 13/16	3¾	**60.00**
10	10	1	4 1/16	12 9/16	2 13/16	4	**70.00**
12	6	2	5⅛	8 9/16	2 13/16	4¼	**80.00**
14	7	2	5⅛	9 9/16	2 13/16	5¼	**90.00**
16	8	2	5⅛	10 9/16	2 13/16	5½	**100.00**
18	9	2	5⅛	11 9/16	2 13/16	6½	**115.00**
20	10	2	5⅛	12 9/16	2 13/16	6¾	**140.00**
22	11	2	5⅛	13 9/16	2 13/16	7½	**150.00**
24	12	2	5⅛	14 9/16	2 13/16	7¾	**175.00**

Larger sizes, add per drop **$8.00.**

For Flush type, prices on application.

EDWARDS ANNUNCIATORS

No. 807 HIGH VOLTAGE TYPE



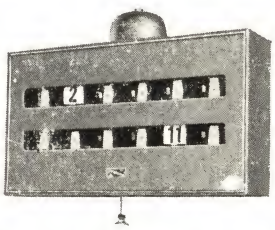
No. 807-F

Hand reset only. 115 volts direct or alternating current standard. Other voltages up to 250 volts, can be supplied. Has a metal case with double micarta backboard on which are mounted the No. 80 drops. Care has been given to the insulation of all current carrying parts, eliminating all materials affected by heat or moisture. Price includes a four-inch bell which may be installed adjacent to the annunciator or where desired. Annunciator is wired with marked connectors for this purpose. Standard finish light grey. Other finishes can be furnished at extra charge.

No. of Drops	Arrangement Across	Arrangement Down	Dimensions, In. High	Dimensions, In. Wide	Dimensions, In. Deep	Price Each
4	4	1	7½	10½	3¾	**$100.00**
6	3	2	9¾	9	3¾	**125.00**
8	4	2	9¾	10½	3¾	**150.00**
10	5	2	9¾	12	3¾	**165.00**
12	6	2	9¾	13½	3¾	**185.00**
Larger sizes, add per drop						**$14.00**

For 250 volts add **$3.00** list per drop.

No. 803 SPRINKLER ANNUNCIATOR



Metal case, hand reset, light grey finish. Special drops are used in this annunciator having a double set of contact clips, one set to short the drop magnet out of the circuit in operation, and the other set to act as a relay to give the current a free path to the bells. With this arrangement the supervisory system may be laid out so that the operation of certain sprinkler heads will operate individual bells, section bells or any arrangement that is desired.

No. of Drops	Arrangement Across	Arrangement Down	Dimensions, In. High	Dimensions, In. Wide	Dimensions, In. Deep	Price Each
4	4	1	5¼	10⅛	3¼	**$80.00**
6	3	2	7¾	8⅛	3¼	**100.00**
8	4	2	7¾	10⅛	3¼	**120.00**
10	5	2	7¾	12⅛	3¼	**135.00**
12	6	2	7¾	14⅛	3¼	**150.00**
Larger sizes, add per drop						**16.00**
For flush mounting, add						**30.00**

No. 156 Monitor Bell mounted on case unless otherwise specified.

LAMP ANNUNCIATORS

Extensively used in large offices, banks and institutions. More attractive and compact and signals are more easily recognized than the old style target type. Each signal has individual lamp and socket. Buzzer signal furnished with each annunciator.

Prices and details on request.

EDWARDS ANNUNCIATORS

No. 808 CENTRAL STATION ANNUNCIATOR



No. 808 Illustration Shows Hinged Type

Used in generating and sub - stations to indicate visibly and audibly such trouble as oil temperature changes, opening of circuit breakers, overheated bearings and high or low tank levels. Designed for direct connection to open circuit auxiliary circuit breaker contacts, thermostats, tank switches, etc. Each indicator substantially built and designed to eliminate its own magnet from the circuit immediately, precluding possibility of burnout irrespective of length of time operating contact is closed but leaving all other indicators in service. Bell rings continuously until silenced by resetting "bell drop," but indicator cannot be restored until source of trouble is corrected. Silencing the bell in conjunction with one indicator does not prevent its subsequent operation with any other indicator.

Remote reset, accessory lamp signals, auxiliary sub-annunciators and other special features can be furnished, price and details on application. 1x1½-inch indications marked as specified. Heavy steel case. Bakelite insulation throughout; complete annunciator tested on 1250-volt R.M.S. for one minute breakdown. Furnished for panel mounting, surface or flush as specified. 4-inch bell furnished for mounting where desired — horn furnished if specified. Dimensions furnished upon receipt of information regarding number of drops and arrangement desired.

Special features: Can be furnished for closed circuit operation on D.C. only. Any annunciator may contain a number of closed circuit drops, and a number of open circuit drops. Available also in Bull's Eye type or Opaque lamp type. Details supplied on request.

Standard finish: Light Grey. 115 volts, 60 cycles or D.C. Specify which required. For voltage from 140 to 250 volts, specify exact voltage, add **$3.00** list per drop. For studs for back panel mounting, add to list per drop **$1.75**. For extra set of upper or lower contact clips add **$3.00** list per drop.

Surface type standard. Can be supplied for flush mounting add to list **$35.00**. For hinged doors, add **$15.00** per door.

No. of Drops	Wt. Lbs. Each	Price Each	No. of Drops	Wt. Lbs. Each	Price Each
4	7	**$145.00**	10	12	**$240.00**
6	8	**180.00**	12	14	**260.00**
8	10	**200.00**	....	....	.....
Larger sizes, add per drop					**$16.00**

SPECIAL ANNUNCIATOR FEATURES

EDWARDS INDIVIDUAL DROPS



No. 80 HAND RESET DROP

As used in all hand reset annunciators except annunciettes.

No.	Description	Price Each
80	Hand Reset Drop	$7.00

No. 4 ELECTRIC RESET DROP



Used in all electric reset annunciators. The indication is a white arrow which points directly at the name card. When reset, arrow drops out of sight. Front is of plain glass and as arrow is between the glass and a dull black background, it can be seen from any angle. No springs or contacts. Cannot shake or jar out of adjustment. It is locked in normal position and cannot indicate until current is passed through magnets.

No.	Description	Price Each
4	Electric Reset Drop	$10.00

SPECIAL ANNUNCIATOR FEATURES

Automatic Reset Annunciators, add to list **$25.00.**

Closed Circuit Annunciators. Add **$14.00** list per drop. No. 81 Hand Reset Annunciator for D.C. operation only.

Special Voltage, up to 12 V., 60 Cyc. or 8 V. D.C. no extra charge. Up to 48 V. or 25 Cyc. add to list 25%.

Special Finishes: Any solid spray color, add to list 20%. Grained wood finishes, add to list 25%. Solid brass or bronze case, add to list, 4 to 10 drops, **$30.00**; 12 to 24 drops, **$50.00.** Chromium finish, price on application.

Electric Reset with pushes on case, per push, **$6.00** list. With terminals only for remote control, per terminal, **$1.00** list.

Special Arrangement of drops, add to list, 4 to 8 drops, **$15.00**; 12 to 24 drops, **$20.00**; 25 to 48 drops, **$30.00**; 50 drops or over, **$75.00.**

Special Markings other than number, per drop, **$0.40** list.

Bell instead of Buzzer, add to list **$10.00.**

Switch on case (SPST or SPDT), **$15.00** list.

EDWARDS RETURN CALL DEVICES

No. 139 RETURN CALL FOR A.C.

Flush Non-Indicating Type



No. 139

This return call station replaces all old-fashioned stations except where D.C. operation is required. It fits any standard single-gang switch box 2⅜ inches deep and takes any standard push button switch plate.

Buzz audible signal has no contacts or pivots and requires no adjustment. May be varied, after installation, from loud tone to a soft high tone through hole in sub-plate. Marked binding posts are easily accessible.

24 volts 60 cyc. standard, up to 48 volts A.C. can be supplied. Price does not include plate.

Price, No. **139** Return Call.....each **$7.30**

No. 140 RETURN CALL FOR A.C.

Flush Indicating Type



No. 140

Has Annunciette type drop, which leaves a visual signal. Operation of push button, when call is answered, automatically resets drop. Recommended for use in places where it is desirable to leave an indication that a call has been made during the occupant's absence. Fits any standard single gang switch box 2⅜ inches deep, and takes any standard push button switch plate. Replaces old-fashioned stations except where D.C. operation is required.

24 volts A.C. standard. Price does not include plate.

Price, No. **140** Return Call.....each **$15.00**

No. 136 SURFACE TYPE FOR D.C. OR A.C.



No. 136

Designed for installation in existing buildings. Provides a neat appearing plate mounted on a shallow cast box, which provides entrance for conduit or open wires. The audible signal is an Edwards double adjustment Lungen buzzer, and station is completely wired for installation with Edwards No. 265 return call push.

The cast box is rubberoid black, plate brushed brass or nickel. Standard package, 1.

Price, No. **136** With Metal Plate.....each **$9.75**
Price, No. **136-B** With Bakelite Plate....each **10.00**

No. 137 FLUSH TYPE FOR D.C. OR A.C.



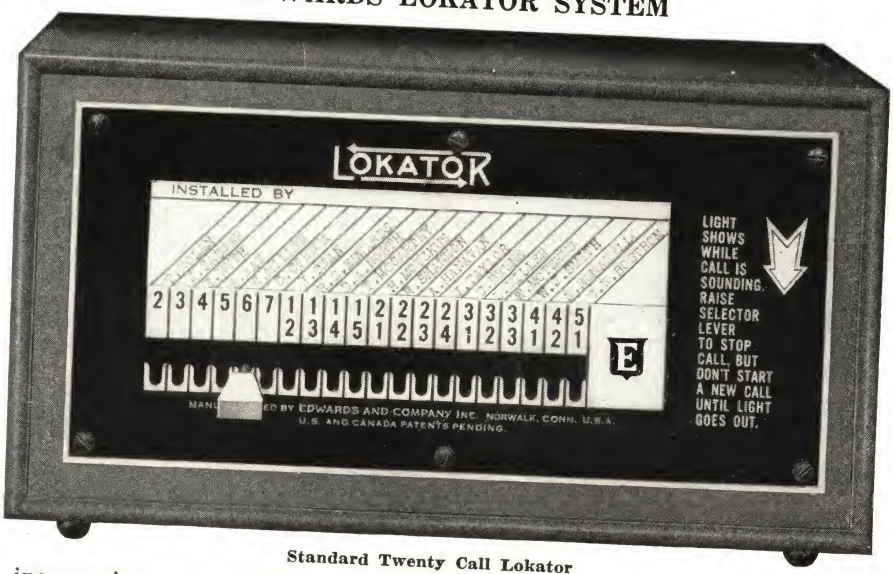
No. 137

For mounting on standard single gang switch box. Audible signal is an Edwards double adjustment Lungen buzzer; station is completely wired for installation with the special Edwards No. 265 return call push.

Standard finish, brushed brass or nickel. Standard package 1.

Price, No. **137** With Metal Plate.....each **$8.20**
Price, No. **137-B** With Bakelite Plate....each **8.75**

EDWARDS LOKATOR SYSTEM



Standard Twenty Call Lokator

An efficient, inexpensive, dependable system, which through the medium of various signals located throughout a plant, store or office enables the telephone operator in one operation to quickly locate any person for a telephone call, etc.

The Lokator is operated entirely by low voltage irrespective of the voltage used to operate the signals. Its mechanism is driven by a small but sturdy, noiseless, synchronous motor. There are no intricate springs, cams, gears, etc.

Plainly designed the Lokator presents a neat, dignified, efficient appearance. Its wrinkle grey finish with black panel relieved in dull chromium is practical and ornamental. It is neutral and harmonizes smartly with all interiors and furniture.

Only 5½x9¾x5½ inches, the Lokator may be placed conveniently on the key shelf or on top of any switchboard. It is light and portable (10 lbs.) and may be shifted about.

It is not necessary for the operator to remember code numbers. All names are typed on a strip protected by plastic, directly above the selector lever.

Every unit of the Lokator system is scientifically standardized. Special installations, which require costly items have been avoided. The easiest, least expensive and most convenient method of wiring the devices may be used. Conduit, molding, etc., are not necessary.

POWER UNIT



The Power Unit

The power units are standardized to provide the most desirable voltage operation of the system from either A.C. or D.C. lighting circuit.

A simple chart shows the quantity of signals one power unit will operate over a given distance and wire size. The system is unlimited, as additional power units may be inserted into the line where needed.

SOUNDING DEVICES



No. 5024 Lokator Bell



No. 5005 Chime



No. 5031 Light Signal

A wide variety of sounding devices is offered to cover all conditions; a soft musical note, a louder note, a sharp toned bell, a silent light flash, a blasting horn. Each one, however, is designed, rated and standardized for operation together. Again there are no "special" problems.

The most commonly used of the sounding devices for all systems are the chimes. They have a pleasant musical tone to which the ear responds subconsciously, but which is not annoying.

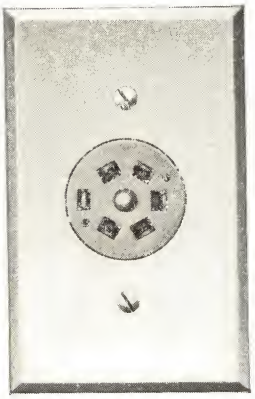
The light signal is ideal for locations where no noise whatsoever is required and then the call is shown by the flashing light.

The specially designed bells give a clear crisp tone and will stand many years of hard service.

Complete information, prices and wiring details will be furnished upon request.

EDWARDS NURSES' CALL SYSTEMS

BEDSIDE STATIONS

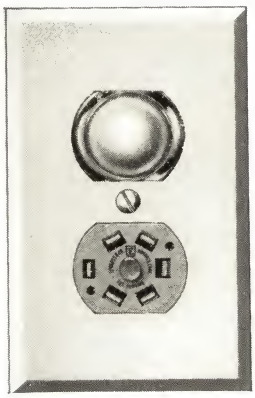


No. 7601

Designed for use primarily in private and semi-private rooms. These stations consist of the Edwards automatic jack for flush or surface mounting, a plug, a six-foot length of cord with clamp and locking button. Cord, plug and button set is washable grey. Stainless steel face plate is standard.

No.	Description	Price Each
7601	Single Cord Bedside Station	$17.50
7602	Double Cord Bedside Station	30.00

BEDSIDE STATIONS WITH PILOT LIGHTS

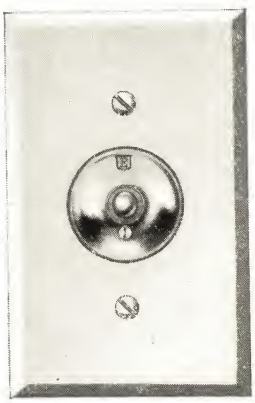


Designed for use primarily in wards or multiple bed rooms, as well as private rooms. Pilot light reassures patient that call has been placed and also in multiple bed rooms indicates to a nurse the station which has called. Pilot light has milk white torpedo shaped lens. Otherwise same as Nos. 7601 or 7602.

Stainless steel face plate is standard. For flush or surface mounting.

No.	Description	Price Each
7611	Single Cord Bedside Station with Pilot Light	$24.00
7612	Double Cord Bedside Station with Pilot Light	36.50

WALL STATION



Used in solariums, laboratories, etc., where no cord-set is required.

Station is equipped with the same high quality locking push mechanism as is used in cord type stations.

For flush or surface mounting. Stainless steel face plate is standard.

No.	Description	Price Each
7603	Wall Station	$11.00

EDWARDS NURSES' CALL SYSTEMS

No. 7031 CORRIDOR LAMP STATIONS



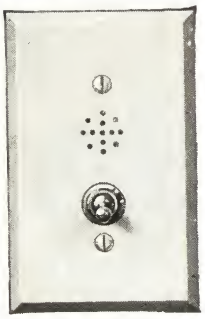
No. 7031

This station is mounted in corridor over room doors. Equipped with glass dome lamp signal held in place by a mounting ring which is hinged to the plate.

Will fit any standard outlet box with 2-gang cover having opening 2⅞x3¾ inches.

Standard finish is white enamel. No outlet box is supplied. Prices on application.

FLUSH BUZZER AND BELL STATION



No. 7137

For diet kitchens, utility and workrooms, where no lamp signals are required or as extension audible signals. Equipped with a mild toned buzzer mounted behind face plate and with a cutout switch.

Fits any standard outlet box with single gang cover with opening 2⅞x1¾ inches.

Standard finish is brush brass or white enamel. No outlet box is supplied.

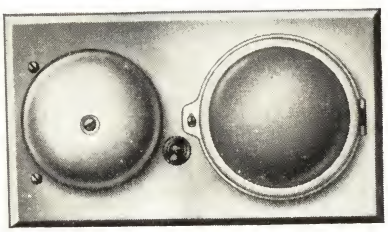
No.	Description	Price Each
7137	Buzzer and Bell Station	$38.50

BALCONY STATIONS

Designed for use on open porches and balconies. Includes automatic jack, 15 feet of cord, locking button with luminous collar, plug, receptacle gasketed with aluminum finished face plate. Screw-on cover secured by chain is provided to protect receptacle when not in use. Station is weatherproof when closed. Takes standard weatherproof plate. For flush or surface mounting.

No.	Description	Price Each
7621-L	Single Cord Balcony Station	$38.50
7622-L	Double Cord Balcony Station	55.00

No. 7133 SINGLE DOME PILOT AND BUZZER STATIONS



No. 7133

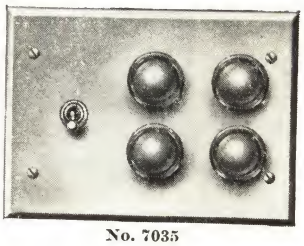
For diet kitchens, utility rooms, work rooms, etc., where individual room signal is not required.

Will fit any deep type outlet box with a 3-gang cover with opening 2⅞x5¾ inches.

Standard finish is brush brass or white enamel. No outlet box is supplied.

EDWARDS NURSES' CALL SYSTEMS

No. 7035 BULL'S EYE TYPE MULTIPLE LAMP AND BUZZER STATIONS



No. 7035

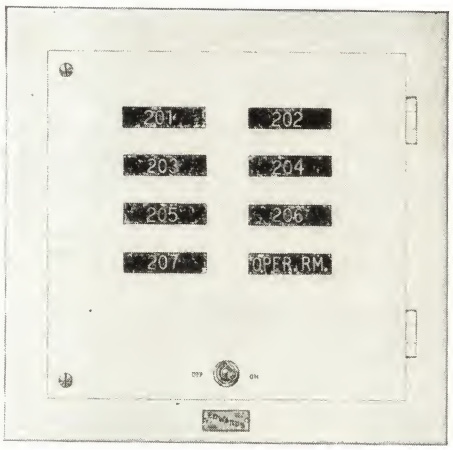
Used in diet kitchens, utility rooms and work rooms where ward and private indications are desired.

Furnished marked for as many indications as necessary. No outlet box supplied up to 8 lamps. Eight lamp stations or over, special outlet box supplied. Standard 2-lamp station requires an outlet box with 2-gang cover having an overall depth of 1¾ inches.

Standard finish is brush brass or white enamel.

Prices on application.

NURSES' STATION ANNUNCIATORS



No. 7042

Nurses' station annunicators, for flush or surface mounting, indicate the room or bed calling. Recommended for use when 8 or more lamps are required. Replaceable individual marking plates for up to 6 characters, indicating origin of call. Mild-toned buzzer inside case has a silencing switch mounted on exterior trim. Emergency feature with additional bell available. Hinged door for easy access to individually partitioned sockets and terminals. Special wall box with knockouts provided for flush mounted units. Standard finish white enamel.

No.	Description
7042	Flush type Nurses' Station Annunciator.
7052	Surface type Nurses' Station Annunciator.

Price on application.

EDWARDS PROGRAM INSTRUMENTS



No. 1931 Single Circuit Program Instrument for Flush Mounting

Single Circuit Type

The Edwards Single Circuit Program Instrument is designed to control automatically the operation of a group of signals which are to sound simultaneously according to the same program schedule. The instrument is particularly suited for installation in small schools, factories and offices where all persons are dismissed or recalled on a single schedule. It may also be adapted with auxiliary circuits for timing assembly lines and industrial processes.

The program element consists of two perforated metal cylinders mounted vertically and revolving about their respective vertical axes.

One is a minute cylinder which makes one complete revolution every two hours. It is perforated at one minute intervals of each two hour periods of a 24 hour day.

The other is a calender cylinder which advances once every two hours and makes one complete revolution in seven days. It is perforated at two hour intervals for each of the seven days.

By inserting metal pins (provided with each instrument) into proper holes in each of the two cylinders, signals may be operated at one minute intervals. 24 hours per day, seven days per week. By omitting pins in the calendar cylinder, signals may be omitted during any desired two hour period. Provision is made for manual operation and cut-off.

The timing unit is a dual Telechron motored movement geared to the program element. The timing unit also controls the operation of contacts which close every minute for a period of 2 to 6 seconds (adjustable) thus controlling signal duration through a relay having contacts rated at 6 amperes at 115 volts. It is recommended that the No. 1900-A or No. 1902-A Control Units be used to control the timing unit.

Standard units are supplied in flush or surface mounting types for operation on 115 volt, 60 cycle power supply. Single or multiple circuit types are available. Standard finish is wrinkle grey. Prices on application.

Model No.	Type	Shpg. Wt. Lbs.	Overall Dimens., In. High	Wide	Deep
1930	Surface	30	12	16	7
1931	Flush	30	14½	18½	7¼

Wallcut dimensions for Flush type: High, 12 inches; wide, 16 inches; deep, 7 inches.

EDWARDS CENTRALLY-CONTROLLED CLOCK SYSTEMS

FOR SCHOOLS, COLLEGES, INSTITUTIONS, PUBLIC BUILDINGS AND INDUSTRY



Classroom Clock



Classroom Clock

Salient Features of Edwards Timekeeping Systems For Modern Schools

1. Quiet operation.
2. No local master clock is required.
3. Operate direct from the regulated alternating current.
4. Available for 115 volt or 24 volt operation.
5. Each timekeeper equipped with self-starting sealed-in-oil rotor, bi-pole, synchronous motor.
6. No oiling, cleaning, winding or regulating.
7. Available for individual installation or as part of an Edwards centrally controlled system.
8. Clocks furnished with sweep second hands.
9. Clock hands move continuously around the dial.
10. National Board of Fire Underwriters' approved type construction throughout.



Classroom Chime



Corridor Bell



Classroom Buzzer

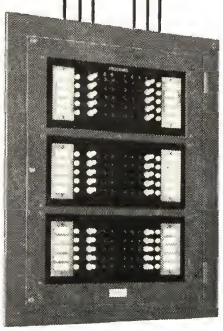
Typical Edwards (Manual Dual Motor Reset) System for a school with signals and control board.



Central Control



Signal Supply



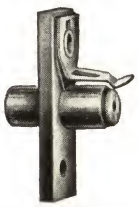
Signal Control Board

To AC Supply

Multiple Circuit Program Instrument

EDWARDS BURGLAR ALARM DEVICES

BURGLAR ALARM SPRINGS



No. 34
Door



No. 236
Trip

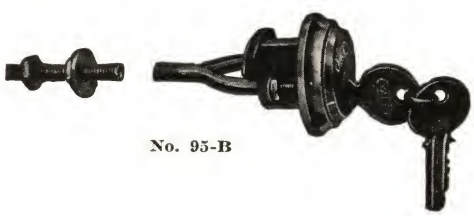
Open Circuit Springs

No.	Description	Size Plate	Std. Pkg.	Price Each
34	Door	2 x 5/8	6	$0.60
38	Make and Break	2 x 5/8	6	.60
236	Door Trip		3	1.50

Closed Circuit Springs

39	Door	2 x 5/8	6	.60

LOCK SWITCHES



No. 95-B

Mounted outside door to allow person with key to enter without sounding alarm. Standard finish, polished brass.

No.	Description	Price Each
95	With Screw Mounting Plate, No Rod	$10.80
95-A	Two Locks	21.50
95-B	Complete with Rod	13.50
	Additional pair of keys	1.50

ELECTRIC MATTING



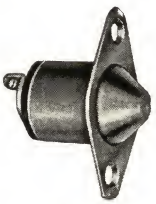
For use in open-circuit systems to protect entrances, stairways, etc., that are otherwise difficult to protect. Can be placed under carpets or other places where foot pressure will close contact. Full length roll can easily be cut into any lengths desired on the job, but the width cannot be changed.

Standard package, 1 full roll, 10 feet long, 2 feet wide.

Price, No. **36** Electric Matting, per sq. ft.....**$4.50**

EDWARDS BURGLAR ALARM DEVICES

ALL-PURPOSE CONTACTOR



This ingenious device has long been needed to replace the confusing collection of old-fashioned "springs." It is not cheaply made but instead is designed for hard service with pure phosphor-bronze scraping contacts, genuine Vulcoid insulation and heavy brass casing and moving parts.

Unlike all old-fashioned springs, it is scientifically designed so that pressure from any direction will depress the nosing. The radial action of the nosing requires but easy pressure. The contactor may be installed in any position.

The contactor fits a ¾-inch hole. Overall is 1⅝ inches high, 1⅝ inches deep, including flanges. It need not be mortised except in remote instances where the door or window is a very tight fit. Flat head brass screws are supplied. While it may be used the same as old window and door springs, its universal action makes it more flexible.

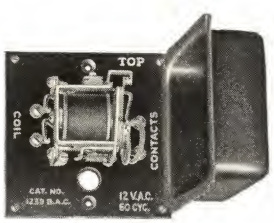
No.	Description	Price Each
44	Pressure on nosing opens circuit	$1.00
45	Pressure on nosing closes circuit	1.00
46	Momentary Contact. Pressure on nosing makes — then breaks circuit and repeats operation in returning to normal	1.00

Standard package, 6.

No. 1239 BURGLAR ALARM RELAYS

Enclosed type. Small, compact, reliable. Contact capacity varies from 1 to 6 amperes, according to voltage.

Standard package 1.



Burglar Alarm Relay Open Circuit

No.	12-Volt 60 Cyc.	24V. 60 Cyc.	115-Volt 60 Cyc.	Other Volt. up to 48V. DC or 60 Cyc.
1239-F	$10.00	$10.00	$11.00	$13.00

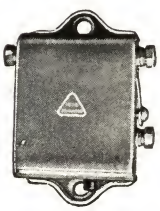
Burglar Alarm Relay Closed Circuit

1239-B	10.00	10.00	11.00	13.00

Burglar Alarm Relay Front and Back Contacts

1239-FB	12.50	12.50	13.50	16.00

CONSTANT RINGING DROP

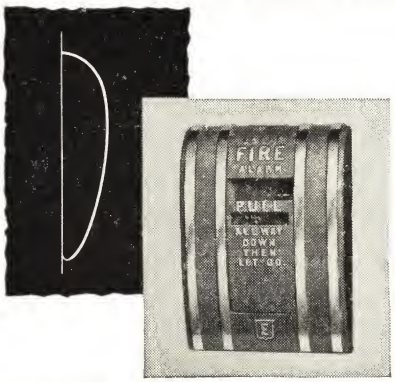


To cause any alarm to ring continuously until drop is reset. 6-8 volts D.C., 8-12 volts A.C.

No. 26 cuts own magnet out of circuit, reducing battery drain.

Price, No. **26**.....each **$5.30**

EDWARDS FIRE ALARM STATION



This new station combines lustrous red enamel with polished metal bands to give a streamlined appearance which will blend with the most modern structures. A pull and release of the handle sets the alarm in motion. No parts extend from the box to cause accidental actuation, interference with code while alarm is sounding, or spoil the sleek appearance. Complete testing instructions are etched on transparent plastic cover over mechanism. Front-connected terminal blocks are readily and easily accessible. Elongated mounting holes permit alignment after station is on the wall.

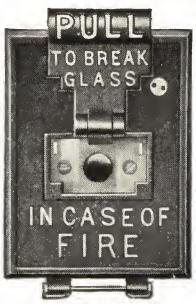
Break-glass type stations have an easily replaceable glass rod across the handle assuring "break-glass" security against tampering yet has the same single-action operation.

Pre-signal stations have, in addition to all the features of the standard stations, a tumbler type lock on the right side of the station. A pre-signal alarm sounds at pre-determined place — general alarm is sounded by turning key in lock and pulling lever at any station.

No.	Description	Price Each
1250	Pull Lever Station	**$60.00**
1251	Pull Lever, Break-glass Station	**72.00**
1252	Pull Lever, Pre-signal Station	**72.00**
1253	Pull Lever, Pre-signal, break-glass Station	**80.00**

Note: When ordering be sure to specify P.P. 24900 Wall Box for flush mounting or P.P. 24901 Back Box for surface mounting.

EDWARDS FIRE ALARM SYSTEMS
FIRE AND EMERGENCY STATIONS



No. 227 or 227C

These stations replace the unsightliness and nuisance of hammers and chains. Underwriters' approved. First pull lever breaks glass, allowing plunger to come into alarm position. Lever falls down, displaying arrow signal and words "Replace Glass." Bumping lever will not cause accidental alarm. Emergency types ideal for swimming pools, electric stations, etc. Specify whether Fire station or Emergency station desired. 60-125 volts. Test key allows hinged front to open without breaking glass. Size $3\frac{7}{16}$x$5\frac{3}{16}$ inches fits any standard switch box. Red finish, aluminum letters.

No.	Description	Price Each
227	Flush-Open Circuit	**$11.00**
227C	Flush-Closed Circuit	**14.00**
228	Surface-Open Circuit	**14.00**
228C	Surface-Closed Circuit	**16.50**
***77**	Wood Back, (no test, low voltage, 3¼-inch diameter) with chain	**4.10**

EDWARDS FIRE ALARM SYSTEMS
AUTOMATIC FIRE ALARM STATIONS

Where it is desired to have systems operate in event of temperature rise instead of being manually operated, automatic fire alarm stations may be employed instead of the break-glass non-code stations and may be used with any of the following systems: VOA, VOD, SSMR, SSAMR, CCVA.

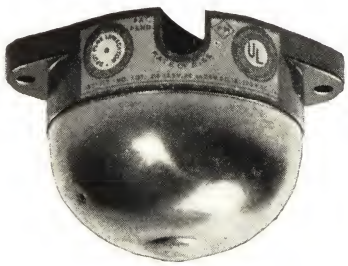
These stations are approved by the Underwriters' Laboratories. They are designed for attachment as a cover plate to a standard outlet box with mounting holes spaced 2¾ inches between centers. May be used as a part of a closed circuit supervised system or as part of a simple open circuit system as desired. Available in two types, No. 230 rated at 150° for normal temperatures and No. 231 rated at 212° for use near furnace or heater or other locations where high temperatures prevail.

Each automatic station will protect an area of 156 square feet of ceiling area. Stations should not be placed more than 6 feet from walls nor more than 12½ feet apart. In ordering give complete details regarding location of each station.

No.	Description	Price Each
230	Rated at 150 degrees	**$7.00**
231	Rated at 212 degrees	**7.00**
241	Rated at 165 degrees	**7.00**
242	Rated at 212 degrees	**7.00**

No. 1405-L FARADAY "SPOT FIRE LOWECATOR"

Rate of Rise and Fixed Temperature Type Thermostats



For locations where rate of rise feature is also needed, the "Spot Fire Lowecator" as furnished by "Faraday" should be used. Sturdy in construction, but extremely sensitive to rapid rises in temperature, it is the ideal unit for such locations. Accurate, reliable, indication of danger condition is obtained almost instantly by their use. Design provides for facility of mounting, and temperature ratings are for 165° F. and 212° F. Underwriters approval of 30 foot spacings allows protection of 900 square feet of unrestricted floor space with one unit.

Greatest base width is 3⅛ inches. Diameter of dome is 2⅜ inches. Projection from wall, or plate is approximately 2 inches. Made with contacts normally open (apart) only. Not made with contacts normally closed (together). Fixed temperature feature is also included so that this thermostat will provide alarm initiation not only for rapid temperature rises, but also in case the fire is of slow, smouldering type. Specify temperature when ordering.

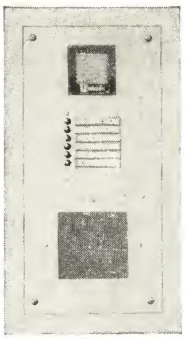
Price, No. **1405-L** "Spot Fire Lowecator".....**$7.00**

EDWARDS APARTMENT HOUSE TELEPHONES

This new modernized line of Apartment House Telephones permits neat, attractive, efficient installations. Mechanically, the system is perfect — no "tincanny" nor weak transmissions. The finish of the face plates is satin brass.

There is an Edwards Telephone System for every apartment requirement whether simple or complex — irrespective of the number of entrances. Details supplied on receipt of complete specifications — or the engineering department of this company will furnish a general specification for the particular requirements.

Vestibule Telephones

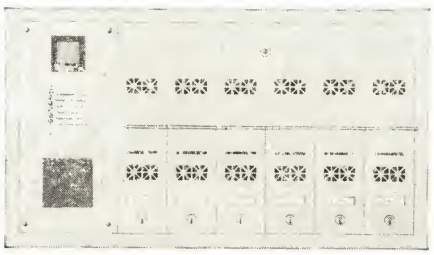


No. 2200 Cordless Loud Speaking Vestibule Telephone

These new units are a complete innovation from every standpoint and have many advantages in appearance, operation and installation.

The name directions are on the sub-plate and names are clearly visible through glass windows — but are not accessible to the tenants. The names are protected from dust and dirt and can be kept sightly at all times.

The apartment number designation is furnished as ordered with each unit and remains permanently in its correct position. The cordless units are of new design using radio type cone speakers. The voice transmission is clear and full — not "tincanny" as most units were in the past.

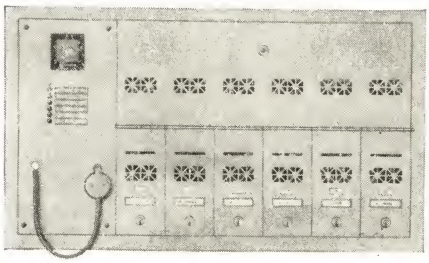


No. 2601 Cordless Loud Speaking Vestibule Unit with Mail Boxes

The wall box has ample room for convenient wiring, with ¾" knockouts on all sides. Wall box must be shipped with mechanism.

The sub-plate is strongly cabled and laced to the back of the terminal strip with soldered connections. The sub-plate can hang by its cable while easy front connections are made to complete the job. The sub-plate is then attached to the wall box and the finished plate mounted overall.

The face plate is easily removable whenever the superintendent wishes to change a tenant's name.



No. 2611 Receiver and Cord Type Vestibule Unit with Mail Boxes

Where lobby plans permit, the Vestibule Unit should be installed alone. The appearance is better, the cost of installation lower and there is less chance for confliction in jurisdiction of the various trades. However, the Vestibule Unit is furnished in the same frame as the Mail Boxes where this type installation is feasible. Also available with armored cord and watch case receiver instead of loud speaking.

For janitors' instruments, trade entrance units, etc. — details on application.

EDWARDS APARTMENT HOUSE TELEPHONES

This new modernized line of Apartment House Telephones permits a neat, attractive, efficient installation. Mechanically, the telephones are perfect—neither "tincanny" nor weak. Standard finish is black or ivory as specified. Special finish on application.

There is an Edwards Telephone System for every apartment requirement — large or small — irrespective of the number of entrances, etc. Details supplied upon receipt of complete specifications. Suite telephones are available for all construction problems: Flush — Thin Wall, for use in newer type construction where wall depth is insufficient to accommodate the usual wall box, and Surface Type.



Loud Speaking Type Flush Suite Phone



Cord and Receiver Type Flush Suite Phone



Cord and Receiver Type Surface Suite Phone



Loud Speaking Flush Suite Phone

Suite Telephones

This new telephone combines decorative appearance with highly improved mechanical construction and transmission. Both cord and receiver and receiverless types have an attractive front with voice transmissions with natural depth and quality—free from the usual "tincanny" reception. Receiverless types eliminate the annoyance of broken cords and pilfered receivers.

On the receiverless type the old "Press-to-Talk" push has been replaced with an easy action plastic member which is simply held down by the weight of a finger while using the telephone. Its purpose is to supply operating current to the telephone. It is not necessary to depress while talking and release while listening.

The mechanical construction of this telephone sets a new high for excellence. All springs are of pure phosphor bronze with sturdy wiping contact and the transmitter and receiver units follow advanced telephone engineering practice.

The decorative face plate carries no parts whatsoever and is supplied in a variety of finishes. Damaged or badly marred plates can always be replaced at low cost.

Name card designations for push buttons are located on the unit itself but are visible through windows in the face plate.

The complete telephone mechanism is assembled on a sturdy plastic base. Large, clearly marked binding posts are easily accessible for front connection.

The complete unit is easily installed and plumbed in the wall with plenty of room for wiring. Face plates need not be installed until painting and decorating is finished and suite is ready for occupancy.

Wall boxes for both flush and thin wall telephones have ample knockouts and wiring space. Designed for use with standard box cleats (GE SP6605). Hangers not included in price of phone. Wall boxes can be shipped to the job for roughing in before shipment of operating material is required.

EDWARDS INTERCOMMUNICATING TELEPHONE SYSTEMS

PARTY LINE SYSTEM No. 7

Common Ringing—Common Talking



Provides for one conversation at a time. Pressing the button of any telephone rings all stations at the same time, necessitating a coded system of ringing. All metal case, black finish. Furnished with steel back box.

No.	Type	Price
4060	Surface Wall	$23.50
4061	Flush Wall	23.50
4063	Desk Telephone	55.00
4065	Handset	40.00

LIMITED SELECTOR SYSTEM No. 4

Selective Ringing—Common Talking

Provides intercommunication for as many as 13 stations. Only one conversation at a time. Pressing button opposite the name of station desired rings that station only. Satisfactory for small offices, residences, etc., where limited conversation will not be an inconvenience.



System No. 4 No. of Buttons	No. 4070 Surface Wall Type	No. 4071 Flush Wall Type	No. 4072 Cradle Type	No. 4075 Handset and Button Pad
4	$30.00	$30.00	$60.00	$46.00
8	40.00	45.00	65.00	55.00
12	46.00	55.00	75.00	64.00

All metal case, black finish.

UNLIMITED SWITCHBOARD SYSTEM No. 50

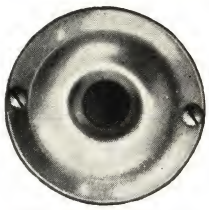
Provides private intercommunication through a lamp switchboard to an unlimited number of outlying stations. Ideal for large apartments, industrial plants, large schools, etc.

Lamp signal switchboards in three modern designs—flush wall, pedestal, and desk types meet all requirements. Outlying station telephones in surface wall, flush wall, cradle desk, suspended handset wall, and suspended handset desk types are available.

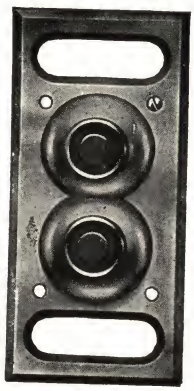
Price of System No. 50 on application.

EDWARDS STAMPED SURFACE PUSHES

SATIN BRASS FINISH



No. 600 (2 5/16" Dia.)
No. 603 (1¾" Dia.)



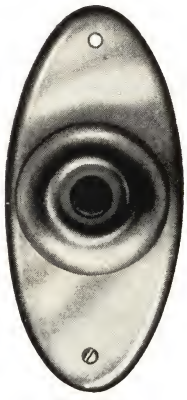
No. 602



No. 605



No. 606



No. 609

No.	Description	Std. Pkg.	Wt. Lbs.	Price Each
600	2 5/16" Dia. Round Push	12	1	$0.25
602	2"x4 9/16" 2 Name Card Holder	6	¾	.50
603	1¾" Dia. Small Round Push	12	¾	.25
605	1¼"x3½" Narrow Rectangular Type	12	1	.45
606	1 9/16"x2⅜" Small Elliptical Type	12	¾	.33
607	2 1/16"x2⅝" Rectangular Card Holder	12	1	.40
608	2 1/16"x4½" Wide Rectangular Type	12	1½	.55
609	2 1/16"x4½" Large Oval Type	12	1½	.55

PUSH BUTTON ESCUTCHEON PLATES



No. 62-D



No. 62

These plates present fine appearance when used with flat center or protruding push button. Price of plate does not include push button. Standard finish: nickel or brush brass as specified. For ⅜-inch pushes only.

No.	Width In.	Height In.	Std. Pkg.	Price Each
62	1¼	2	6	$0.50
62-D	1½	2¼	6	.50

EDWARDS PUSH BUTTONS

LOW-VOLTAGE PUSH BUTTONS



No. 620

No. 620 redesigned and improved for softer push action and longer life. Stronger plastic body holds heavy, rugged terminals. Large push area. Spring clips hold push in hole. White flat, center button. Standard finish nickel. Brushed brass, no extra charge.

No. 59 flat center push, for use in ¾-inch hole. Rim is ⅛-inch wide. Has spring clips for mounting.

No.	Description	Std. Pkg.	Price Each
620	Insulated—fits ⅝-inch hole	12	**$0.42**
620-L	Insulated—Luminous Center, fits ⅝-inch hole	12	**.47**
59	Insulated—fits ¾-inch hole	6	**1.00**

LOW-VOLTAGE PUSH BUTTON

No. 625 Rounded Raised Center Push

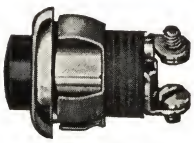
Spring clips hold push in hole. Furnished with white round center only. Standard finish for rim is nickel — brushed brass, if specified, at no extra charge.



No. 625

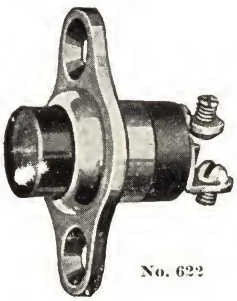
No.	Center	Std. Pkg.	Price Each
625	White	6	**$0.80**

No. 621 PROTRUDING CENTER PUSH



No. 621

Insulated type. Same fine mechanism as No. 625. No. 623 has locknut to hold push firmly on panels and places where there is heavy vibration such as planes, boats, trains, etc. No. 623 is usable only where access to back is possible to set up locknut. Standard finish of rims, nickel. Brushed brass if specified, no extra charge.



No. 622

No.	Fits Hole Inches	Std. Pkg.	Price Each
	With Spring Clips		
621	⅝	6	**$0.95**
	Forced Fit		
116	½	1	**2.25**
	With Escutcheon		
622	$\frac{9}{16}$	6	**1.30**
	With Locknut		
623	⅝	6	**1.20**

PENDANT PUSH

Improved streamlined pendant push. Smaller in size and easier to grip than old pendant type push. No. 68 Black; No. 69 Mahogany; No. 70 White. Standard package quantity, 3.

Price, Pendant Push.....**$0.80**



EDWARDS PUSH BUTTONS

HIGH-VOLTAGE PUSH BUTTONS



Underwriters' Approved, 125-250 volts, 1 amp. Strong, sturdy, quick make and break. Fits ⅞-inch hole. Has locknut for fastening to plate or panel.

No.	Description	Price Each
850	As described	**$4.40**
851	Pendant Push, Bakelite Case	**8.00**
852	Weatherproof on Switch Plate	**10.00**

A quick break push with heavy contacts. Standard finish. nickel. Brush brass at no extra charge.



No. 820 No. 821

No.	Voltage	Type	Fits Hole	Std. Pkg.	Wt. Oz.	Price Each
820	125	Standard	¾	1	4	**$4.00**
821	125	Locknut	⅞	1	4	**4.40**

MULTIPLE-CONTACT PUSHES

For 50 Volts or Less A.C. or D.C. Operation



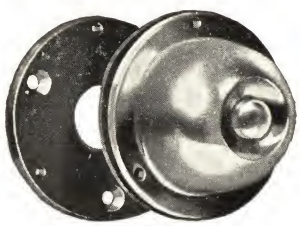
No. 250 Four-point, normally open, fits ¾-inch hole. Depressing plunger closes 4 points together as a common circuit. No. 251 Two-point, closed circuit push, fits ¾-inch hole. No. 255 Three-point "return call" push. Fits ¾-inch hole. Depressing plunger breaks one circuit and makes another. Designed for 3 -wire return call systems and where a number of pushes are installed, one for each bell, with one push to ring all bells.

Special modifications of these pushes for industry component use are available in contract quantity lots.

No.	Description	Fits Hole Inches	Std. Pkg.	Price Each
250	Multiple Circuit Push	¾	1	**$2.10**
251	Closed Circuit Push	¾	1	**3.10**
255	"Return Call" Push	¾	1	**2.90**

WATERTIGHT PUSH

Solid brass push button for use outside of buildings, industrials, for marine work, ice plants, chemical plants, etc. No. 1786-C has a solid brass conduit plate threaded to fit ½-inch conduit. Standard package 1.



No.	Diam. of Base, In.	Diam. of Body, In.	Depth In.	Price Each
1786	2⅜	1⅝	$1\frac{3}{16}$	**$6.00**
1786-C	2⅜	1⅝	$1\frac{5}{16}$	**8.50**

EDWARDS DESK PUSHES

No. 197-T BAKELITE DESK PUSH



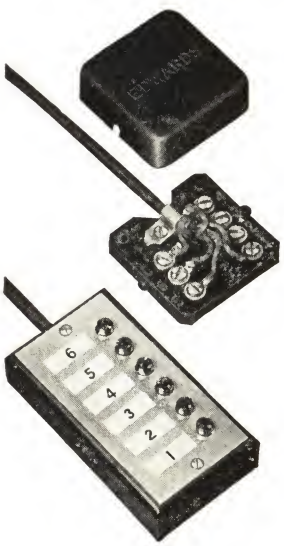
Has phosphor-bronze scraping contacts and is fully insulated. Base is covered with soft sponge rubber.

Has changeable name cards. Standard color, black.

Connector block has bakelite mat and metal cover as well as 6-foot cord.

No. of Buttons	No.	Std. Pkg.	Price Each	No. of Buttons	No.	Std. Pkg.	Price Each
1	197-T	1	$7.80	4	197-T	1	$13.75
2	197-T	1	9.60	6	197-T	1	21.00

ALL-METAL DESK PUSH



For desk top use. Mounting holes also provided for wall mounting, surface or concealed wiring. Heavy gauge, Bonderized steel body. Molded center. Completely insulated. Double row of push buttons for 12-button and larger sizes, single row for smaller sizes.

Plain card furnished for typing names and inserting under transparent celluloid and metal top plate.

Furnished with 6 ft. cord and connector. Standard finish: black with satin nickel top plate. Standard package, 1.

No. of Buttons	No. 192-T	No. 194	No. of Buttons	No. 192-T	No. 194
1	$13.00	$16.50	8	$39.00	$50.00
2	16.50	18.25	10	43.00	.....
4	23.00	26.25	12	56.00	.....
6	30.00	38.00	....	.....	.....
Larger sizes, add per button....				4.50	4.00

EDWARDS DESK PUSHES

No. 146-S PUSH BUTTON BLOCK

With Numbered Pushes



Of molded bakelite with removable weighted base and a composition pad. Flush numbered midget pushes supplied with the block. Can be mounted on the side of a desk with the use of concealed mounting hole provided for that purpose. Furnished with 6 feet of cord wired to push buttons.

Standard finish: Black.

Special engravings, initials or names may be made. Details on application.

No. of Buttons	Std. Pkg.	Price Each	No. of Buttons	Std. Pkg.	Price Each
1	3	$5.25	4	3	$10.35
2	3	6.75	6	3	14.75

EDWARDS FLOOR PUSHES

DIXIE FLOOR TREAD



Recommended as a dining room push for calling servant during meals. Contact easily made by pressure at any point. Rubber-covered base prevents push from sliding. The connectors are firm and reliable. The complete device is designed for quick, easy installation. Cord enters through brass strap which hold it securely. Standard finish, satin brass. Standard package, 3; weight, 1 pound.

Price, No. **290** Dixie Floor Tread.....each **$1.65**

RECEPTAPLUG AND FLOOR PUSH





For non-carpeted floors or rugs. Generally found where No. 290 floor tread is used beneath floor-covering and can be reached to change its position. A compact attachment plug for use with No. 290 floor tread. Included in package is a center pin so the unit may also be used as a floor push.

Receptacle mortises into floor. Rubber-capped plug is inserted flush into receptacle, leaving no "bulge." Recommended installation is combination of No. 235-290. (It may be shipped complete in one package.)

Plug will not fit standard lighting receptacle, thus preventing the possibility of shorting lighting line.

Standard finish, satin brass with brown rubber caps. Standard package 3; weight, 8 ounces.

Price, No. **235** Receptaplug with floor push for non-carpeted floors.....each **$1.65**
Price, Plug only for No. 235.....each **.70**

EDWARDS PUSH BUTTONS

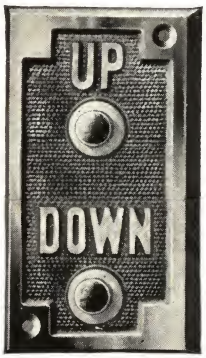
TAPESTRY BELL PULL SWITCH



Designed to allow the use of bell ropes or tapestry ribbons rather than push buttons, for bell and annunciator systems in residences and apartments following Old Colonial, Italian or English style of interior. Has positive self-cleaning contacts that assure dependable service. Mounts in the wall usually near the ceiling. Fits any standard single gang switch box or cover. No face plate is furnished, thus permitting the use of any standard single gang toggle switch plate of brass, glass, bakelite, etc., as may be desired. Split ring is fastened to end of operating lever for easy attachment of rope or tapestry ribbon.

Price, No. **280** Pull Cord Switch.....each **$15.00**

No. 159 ELEVATOR CALL BUTTONS



Designed for use with Edwards annunciators or any standard make annunciator.

Case is iron, finished in black, for surface mounting. Other commercial finishes, add 50 per cent.

No.	Description	Wt. Lbs.	Price Each
159	Up & Down	3	**$10.00**
159U	Up only	3	**8.50**
159D	Down only..	3	**8.50**
159X	Plain	3	**8.50**



SWITCH BOX PLATE

For standard switch box. Drilled for 1, 2 or 3 buttons ⅝-inch. Screw hole centers 3 3/32 inches. Machine screws furnished. Plate does not include push buttons.

No.	For No. of Buttons	Std. Pkg.	Price Each
147	1	1	**$0.50**
147	2	1	**.75**
147	3	1	**1.00**

OUR FACILITIES

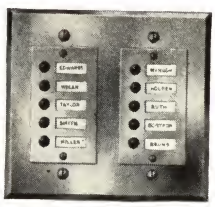
ARE MAINTAINED FOR YOU

DO NOT HESITATE TO USE THEM

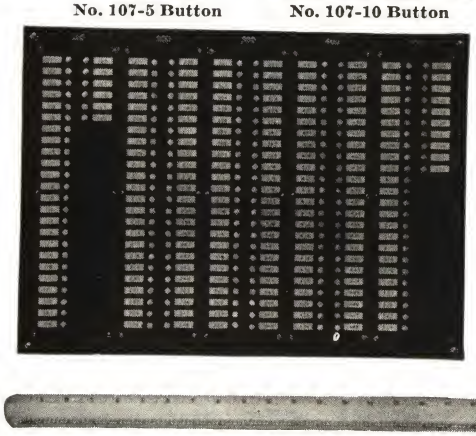
EDWARDS PUSH BUTTON PANELS



No. 107-5 Button



No. 107-10 Button



A compact, sturdy, reasonably priced push button panel designed to meet the requirements of small schools, public buildings, offices, etc., where no "all" or "master" push button is required. This panel is ideal where space is limited and where economy is a factor. For example: 1 to 5 buttons inclusive are mounted on a plate to fit a standard single-gang switch box.

Sizes 6 to 10 buttons inclusive are mounted on a plate to fit a two-gang switch box. 11 to 15 buttons are mounted on a plate to fit a three-gang switch box. Price does not include back boxes. Larger sizes are provided with a steel wall box, for flush mounting. Terminal board is provided suitable for mounting in back box and is wired to panel on sizes 16 buttons and larger. Lower illustration shows a panel which would accommodate 240 buttons and yet the size is only 17½ inches wide by 13 inches high.

Standard is brushed brass. Any solid spray finish no extra charge if specified. For chrome, add 50 per cent.

No.	Description	Price
107	3 to 15 Buttons, per Button.....	**$4.00**
107	16 Buttons and Up, with Wall Box, per Button	**6.00**

EDWARDS PUSH BUTTONS

WEATHERPROOF PUSH BUTTON FOR HIGH VOLTAGE—WATERPROOF

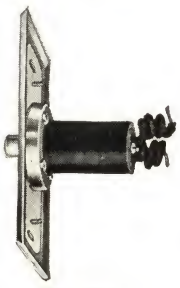


No. 1785

Surface type. For 125 volts or less. Cast aluminum housing with hole drilled for surface mounting. Finish, light grey. Special construction for exterior weatherproof installation. Rubber gaskets seal box, case and top ring. Mechanism compartment is covered with a leather diaphragm to insure complete protection from the elements. Drilled and tapped for ½-inch conduit, (¾-inch if so specified). Center push is not exposed so there is no danger of moisture affecting operation of plunger. Dimensions: approximately 2¾ x 2⅜ in.

Price, No. **1785** Surface Type, Waterproof Push .....each **$10.00**

FLUSH TYPE WEATHERPROOF PUSH

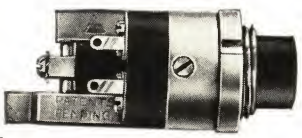


No. 852

Fits any standard box at least 2⅜ inches deep. For 250 volts or less. Same mechanism as No. 850, but special construction for exterior weatherproof installation. A special bronze shell forms a watertight compartment for the plunger of the standard push. This compartment is covered with a leather diaphragm over which is placed a second bronze plunger that protrudes through the sub-plate to which the unit is securely fastened. Wire leads are brought through a tight-fitting washer and the complete unit is encased in a threaded bakelite casing so that moisture cannot reach the mechanism from any point. The outer plate is secured to the sub-plate with two screws. Rubber gaskets also furnished for use between plate and wall. Standard finish: bronze.

Price, No. **852** Flush Type Weatherproof Push .....each **$10.00**

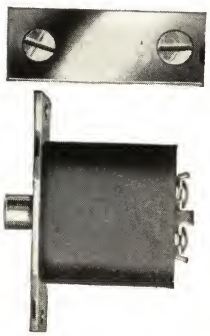
PUSHES FOR PROGRAM BELL PANELS



Replaces old fashioned strap key. Contacts are phosphor bronze, self cleaning and of a sufficient size to carry an unusually heavy current demand on low voltage work. Rugged construction will withstand hard service. Centers can be engraved with numbers or letters. Fits ⅞-inch hole.

Cat. No.	Description	Wt. Lbs. Std.Pkg.	Price Each
111	Break and Make Contact	¼	**$6.50**
112	Two sets of Make Contacts for open circuit use	¼	**6.50**
113	Two sets for Break Contacts for closed circuit use	¼	**6.50**

EDWARDS DOOR LIGHT SWITCH



A ruggedly constructed door switch for operating step lights. Built to stand up under the constant operation found in bus service. Face plate is of heavy gauge brass with polished nickel finish. Head of plunger is stainless steel. Contacts are enclosed in Bakelite base. Bumper plate and mounting screws supplied with each.

No.	Description	Price Each
504	Open Circuit	**$4.20**
505	Closed Circuit ..	**5.00**

EDWARDS DOOR OPENERS

These door openers may be used on either right or left hand doors. Regular voltages 4½ to 6 volts D.C. Nos. 152 and 154 can be furnished for special voltages up to 115 volts. Prices on request.

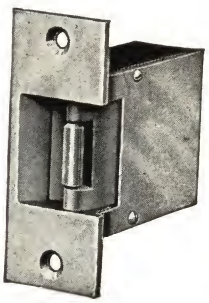
No. 9 ECONOMY—MORTISE TYPE



Economy mortise type; solid brass nose and face plate. Made of heavy pressed steel, heavily brass plated. Used extensively for apartments. Fits the same size mortise as same shape openers of other manufacturers. Height, 3⅝ inches; depth, 2⅛ inches; thickness, 1 inch; nosing opening, 1⅜ inches; face plate, 5⅞ x 1¼ inches.

No.	Std. Pkg.	Wt. Lbs. Std.Pkg.	Price Each
9	6	5	**$4.00**

No. 154 MORTISE TYPE



Roller nose; for heavy doors; requires smaller mortise than Economy. Body height, 2 inches; depth, 2⅞ inches; width, 1¼ inches; nosing opening, 1¼ inches; face plate, 1¼ x 3⅜ inches.

No.	Std. Pkg.	Wt. Lbs. Std.Pkg.	Price Each
154	1	¾	**$9.00**

No. 152 RIM TYPE



Solid nose; for surface locks, thin doors, etc. Made of cast iron. Nose opening, 1¼ inches. Brass front.

No.	Dim., In. H.	D.	T.	Std. Pkg.	Price Each
152	2	3⅛	1⅛	1	**$7.00**

RODALE BELL PUSHES



BAKELITE PUSH BUTTONS

One to box with mounting screws. Carton, 20; standard package, 200. Average weight, 10 lbs.

Cat. No.	Description	Diameter Inches	Carton	Price Each
300	Midget, Brown	1 5/16	20	**$0.16**
300V	Midget, Ivory	1 5/16	20	**.21**
303	Large, Brown	1 13/16	20	**.16**
303V	Large, Ivory	1 13/16	20	**.21**

BAKELITE PUSH BUTTONS

Square—1¾ x 1¾ Inches

Cat. No.	Description	Price Each
301	Brown	**$0.16**
301V	Ivory	**.21**



Single Name Plate—2 1/16 x 2⅜ Inches

302	Brown	**$0.20**
302V	Ivory	**.25**



2-GANG NAME PLATE

2 1/16 inches wide x 4⅜ inches long. One to box with screws. Carton, 10; standard package, 100. Weight, 12 lbs.

Price, No. **305** Brown.....each **$0.46**

BAKELITE OVAL PUSH BUTTONS

One to box with mounting screws. Carton, 25; standard package, 250. Weight, 11 lbs.



Price, No. **126** Brown.....each **$0.14**
Price, No. **127** Brown, with nameplate .....each **.18**



PENDANT PEAR PUSH BUTTON

Carton, 10; standard package, 100. Weight, 5 lbs.

Price, No. **313** Brown.....each **$0.32**
Price, No. **313V** Ivory .....each **.42**

PEARL PUSH BUTTONS

Nickle Plated Frame

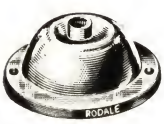


⅝ inch diameter. Carton, 10; standard package, 100. Weight, 2 lbs.

Price, No. **325** Deep.....each **$0.36**
Price, No. **306** .....each **.24**

BRASS PUSH BUTTONS

Bakelite Center



Carton, 20; standard package, 200.

Cat. No.	Description	Diam. In.	Price Each
310	Small	1¾	**$0.19**
311	Large	2¼	**.19**
312	Name Plate	2x2 5/16	**.26**
323	2-Gang Name Plate	2x4⅜	**.52**

NuTONE LUMINOUS PUSH BUTTONS



No. PB-3 MODERN

Smart black and ivory plastic, beautiful by day, luminous by night. Chrome-plated brass cover conceals mounting screws — weatherproof, rust-proof — can't stain door frame. Beautiful, 5-color self dispensing, counter unit holds 12 buttons.

Standard package: 12 buttons in counter merchandiser.

Cat. No.	Size Ins.	Shpg. Wt. Std. Pkg.	Price Each
PB-3	3x⅞	1½ lb.	**$1.25**

No. PB-4 JEWEL



Colonial style polished brass 3-inch button plate — luminous button glows at night. Coil spring gives positive sliding contact — fully insulated, weatherproof. Counter unit displays 12 buttons.

Standard package: 12 buttons in counter merchandiser.

Cat. No.	Size Ins.	Shpg. Wt. Std. Pkg.	Price Each
PB-4	3x1¼	1 lb.	**$1.25**

No. PB-1 ROUND



All-luminous, ivory plastic button, with brass rim, fully insulated, has positive sliding contact. Tested and approved by leading Electrical Laboratories. Fits ⅝-inch hole.

Standard package: 24 buttons in counter merchandiser.

Cat. No	Size Ins.	Shpg. Wt. Std. Pkg.	Price Each
PB-1	1 3/16	6 oz.	**$0.40**

"GLOW-IN-THE-DARK" PUSH BUTTONS



PB-2 "Mt. Vernon"



PB-5 "Concord"



PB-6 "Economy"

PB-2 Mt. Vernon—Stately, hammered design solid cast brass with luminous plastic button. 1½x 3¼ inches. Standard package, 12; weight 2½ lbs. ..... each **$1.25**

PB-5 Concord—Beautifully styled, solid cast brass push button with personalized name plate. Standard package, 6; weight 2¼ lbs...each ..**$2.50**

PB-6 Economy—A new, stunning design. Solid brass and luminous plastic button. Also available in chrome. 1⅜x2½ inches. Standard package, 12; weight, 1¼ lb. .....each **$1.00**

NuTONE PUSH BUTTONS

No. PB-7 ARISTOCRAT PUSH BUTTON



Solid forged brass cover, lacquer baked for protection against all weather conditions, tarnish proof. Button mechanism is precision engineered to insure trouble-free operation.

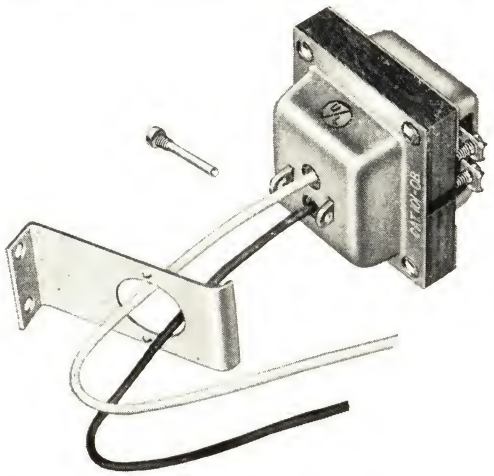
Brass cover snaps easily over mechanism, covering all screws. Install in minutes with only screwdriver — no extra holes required in door casing. Packed in cellophane window-type carton.

Std. Pkg. 6. Wt. 1¼ lbs.

Price, No. **PB-7**
Pushbutton .....each **$1.75**

NuTONE CHIME TRANSFORMERS

101-OB FOR "ANYPLACE" MOUNTING



Greater power, extra strong chime transformer, sturdy construction — for top quality performance, better chime tone. Guaranteed for **Life-Time** against burn out—bi-metal safety switch prevents overload damage. No outlet box plate needed for either model; mount any place—on any box (outlet, wiring, fuse or switch) or open wiring position. Can take substantial increases in instantaneous surge loads. For 115V—50-60 cycle A. C.

Cat. No.	Volt	Dimensions, Inches	Std. Pkg.	Wt.Lbs. Std.Pkg.	Price Each
510	10	2½x1⅞x2⅛	12	11	**$1.70**
101-OB	16	2¼x2⅝x2	12	14	**2.20**
201-OB	24	2¼x2⅝x2½	12	23	**2.75**
320	8–16–24	2¼x2⅝x2½	12	23	**3.00**

WK-100 CHIME WIRING KIT

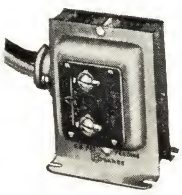
A low priced chime Wiring Kit that makes chime installation easy and saves money. Kit contains NuTone 101-PT Plug-type 16-volt transformer, 115 ft. of 3-color bell wire, a NuTone PB-3 Glow in Dark push-button, box of 40 insulated wire staples and 6 ft. roll of quality friction tape. Standard package, 6.



Price, No. **WK-100** Wiring Kit.....each **$3.95**

EDWARDS DOORBELL, CHIME AND SIGNALING TRANSFORMERS

EASI-MOUNT TRANSFORMERS



Underwriters' Listed for mounting on any outlet box or cabinet with ½-inch knockouts or alone on any surface without box. This ingenious, universal design replaces old style Chime, Doorbell and Tri-Volt transformers. No plates are needed for any type of mounting.

Primary—115 Volts, 50-60 Cycles

Cat. No.	Description	Secondary Volts	Watts	Std. Pkg. Pkg.	Wt.	Price Each
***890**	Doorbell Transformer	10	5	6	6	**$1.72**
***890-Y**	Doorbell Transformer	10	5	6	6	**2.80**
***892**	Chime Transformer	14	10	3	3	**3.20**
894	Chime Transformer	14	10	3	3	**2.20**
896	Tri-Volt 5-Watt Trans...	6–12–18	5	6	6	**2.50**

*Underwriters Listed.

230-volt and 25-cycle transformers available.

25-WATT TRI-VOLT TRANSFORMER

The No. 872 25-watt Tri-Volt transformer provides a greater selection of secondary voltages, although it does not have the Easi-Mount feature. It is primarily adapted to situations where an unusually long wire run exists. Special primaries, secondaries, and 25-cycle transformer can be supplied. Details on request.



Cat. No.	Primary Volts	Primary Cycles	Secondary Volts	Watts	Approx. Wt. Lbs.	Price Each
872	115	50-60	8-16-24	25	2¼	**$5.30**

SIGNALING TRANSFORMERS



Completely enclosed in sturdy, stamped metal housings and are designed to form their own barriers between high and low voltages. These transformers adequately meet all safety and Underwriters' codes and have large conveniently placed binding posts on both primary and secondary, which eliminates splicing, soldering and taping. Wide secondary range of 4-8-12-16-20-24 volts are labeled for simplified installation. Knockouts into both compartments permit entrance with BX, conduit, or open wiring. Nos. 88-50 and 88-100 are Underwriters' Listed.

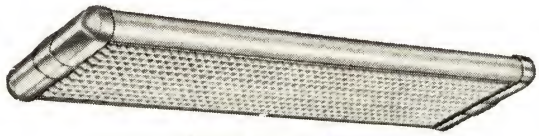
Cat. No.	*Watts	Overall Dimens. Ht.	Wdth.	Ht.	Approx. Wt. Lbs.	Price Each
88-50	50	4¼	3⅝	7⅞	5⅛	**$9.80**
88-100	100	4 7/16	4⅝	8⅝	8¾	**15.70**
88-250	250	6	5⅛	9½	16⅛	**40.40**
88-500	500	6½	6½	12⅛	34⅛	**62.70**
7194	850	6½	7½	14½	42	**68.00**
7195	1000	6½	9¾	14½	58¼	**88.00**

*Ratings apply to 24 volt tap. Wattage reduces proportionately for lower taps.

Example: No. 88-50 delivers 50 watts from 24-volt tap, but only 25 watts from 12-volt tap. 115 volt primaries may be used on up to 130 volts. Special primary voltages up to 230 volts, special primary voltages from 230 to 400 volts, special secondary voltages and 25 cycle tansformers. Details on application.

LEADER FLUORESCENT FIXTURES

FLUORESCENT COMMERCIAL "OFFICER" SERIES FIXTURES



Model No. VL-440

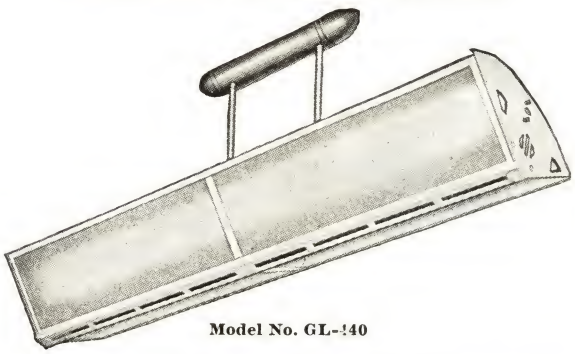
Especially suitable for stores, offices, and institutions. This fixture combines lighting efficiency with simple installation and easy maintenance. Use it as a single unit or in continuous runs — ceiling mounted or suspended. Adjustable Leader Direclite spot light attachments available (excellent for mounting over merchandise).

Specifications: Four 40-watt T-12 48-inch fluorescent lamps. Also Model VL-240 for two 40-watt 48-inch T-12 fluorescent lamps. Housing and channel of 20 gauge steel. Extruded translucent plastic side panels and moulded plastic louvers. Louvers swing down and out of the way for easy relamping and cleaning. Plastic destaticized, warp-proof, dust-resistant and color-fast. Finished in white high-gloss baked enamel. Wired units include UL and ETL approved sockets and easily replaceable starters. Conventional 110-125 volts 60 cycle A.C. Other voltages and instant-start operation available.

Cat. No.	Lights	Dimensions, Inches — Length	Width	Height	Shpg. Wt.Lbs.	Price Each
VL-440	4	53⅜	16¼	5 17/32	48	**$45.80**
VL-240	2	53⅜	10¼	5 17/32	28	**27.82**

Price is for 31° plastic louver.

FLUORESCENT COMMERCIAL GLASS-ENCLOSED LOUVERED FIXTURES



Model No. GL-440

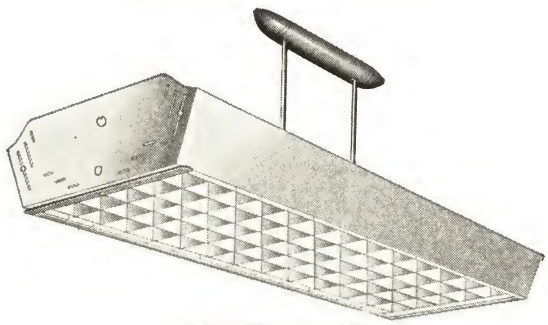
A fixture favorite of architects for offices, stores, and schools. It is used mounted singly or in continuous rows. Note narrow bottom louver which prevents accumulation of dust, etc.

Specifications: Four 40-watt 48-inch T-12 fluorescent lamps. Also Model GL-240 for two 40-watt 48-inch T-12 fluorescent lamps. Housing and channel of 20 gauge steel. Glass panels designed for low-surface brightness. Housing, channel and end caps finished in satin aluminum. Parabolic reflector finished in white high-gloss, chip-proof baked enamel. Wired units include UL and ETL approved sockets, type FS easily replaceable starters and two high p.f. 2-lamp ballasts. Conventional 110-125 volts, 60 cycles A.C. Other voltages and instant-start operation available. Pendant mounting accessories furnished at additional cost.

Cat. No.	Lights	Dimensions, Inches — Length	Width	Height	Shpg. Wt.Lbs.	Price Each
GL-440	4	48 7/16	13¾	7¾	51	**$41.68**
GL-240	2	48 7/16	10½	7¾	32	**23.05**

LEADER FLUORESCENT FIXTURES

FLUORESCENT COMMERCIAL U.R.C. RESEARCH LUMINAIRES



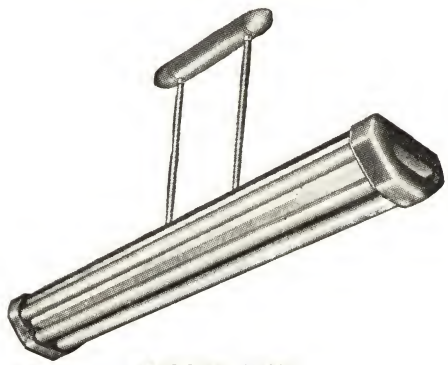
Model No. LRL-440

This fixture conforms to the technical specifications of the Utilities Research Commission (Better Light — Better Sight requirements). Leader offers it in excellent design, beauty and mechanical features. For use as a single unit or in continuous runs — suspended or mounted direct to ceiling.

Specifications: 2 or 4 40-watt 48-inch T-12 fluorescent lamps. Housing and channel of 20 gauge steel. Available with louvers (Model LRL-440) or with glass panels (Model LR-440). Entire side and bottom glass or louver hinged for easy maintenance. Exterior and end caps finished in rich silver-gray enamel. Interior finished in white high-reflecting, chip-proof baked enamel. Wired units include UL and ETL approved sockets, type FS easily replaceable starters, and two high p.f. 2-lamp ballasts. Conventional 110-125 volts 60 cycle A.C. Other voltages on request. Also available for instant-start operation.

Cat. No.	Lights	Dimensions, Inches — Length	Width	Height	Shpg. Wt.Lbs.	Price Each
LRL-440	4	49 9/32	19⅝	7	60	**$44.30**
LR-440	4	49 9/32	19⅝	7	60	**39.32**

FLUORESCENT COMMERCIAL HIGH-LEVEL OPEN-TYPE FIXTURES



Model No. L-440

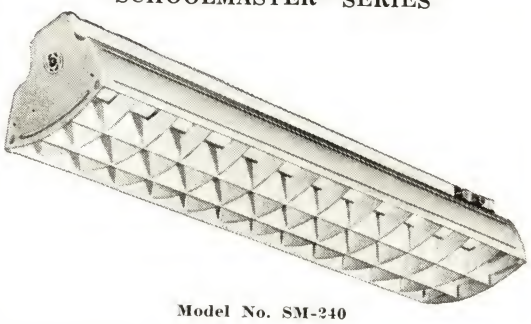
An all-purpose 4-light unit. Also available as Model No. L-240 for 2 lights. Widely used in supermarkets and small stores alike.

Specifications: Housing and end caps of 20 gauge steel. Finished in a rich satin aluminum. Parabolic reflectors are high-gloss, chip-proof baked enamel. UL and ETL approved sockets. Conventional 110-125 volts 60 cycles A.C. Other voltages on request. Instant-start operation available.

Cat. No.	Lights	Dimensions, Inches — Length	Width	Height	Shpg. Wt.Lbs.	Price Each
L-440	4	50	9⅝	5¾	29	**$25.38**
L-240	2	50	8½	5	15	**15.65**

LEADER FLUORESCENT FIXTURES

FLUORESCENT COMMERCIAL "SCHOOLMASTER" SERIES



Model No. SM-240

Especially designed for schoolroom and hospital use. 60% downward and 40% upward light diffusion — same model, but with built-in germicidal lamp (SMG-240). Natural room ventilation causes circulation of air of room to pass over germicidal lamp.

Specifications: Two, three or four 40-watt fluorescent lamps, or 96-inch T-8 or T-12 Slimline lamps. Housing and channel of 18 gauge steel. Built for use as a single unit or in continuous runs. Standard louver cut-offs are 25-35 degrees and 25-45 degrees. Other shielding angles furnished on request. Entire unit finished in white high-gloss baked enamel. Wired units include UL and ETL approved sockets. Also available for instant-start operation. No connection couplers needed for continuous row installation. Swinging louvers for easy servicing.

Cat. No.	Lights	Dimensions, Inches — Length	Width	Height	Shpg. Wt. Lbs.	Price Each
SM-240	2	48 3/32	12 3/8	8 3/16	33	**$24.21**
SM-340	3	48 3/32	12 3/8	8 3/16	40	**30.21**
SM-440	4	48 3/32	12 3/8	8 3/16	45	**32.68**
With 30-watt Germicidal Unit Enclosed in Channel						
SMG-240	2	48 3/32	12 3/8	8 3/16	40	**33.81**
SMG-340	3	48 3/32	12 3/8	8 3/16	45	**39.81**

With 60-Watt T-17 Lamps for Low Surface-Brightness

This variation of the "Schoolmaster" has no louvers or other shielding, so that the abundance of quality light is fully used. Yet through the combination of the T-17 lamps and the efficient V-shaped reflector, there is **no glare.** Glossy paper under this light has little or no specular reflection. Ideal for schools, libraries, offices, etc.

Cat. No.	Lights	Dimensions, Inches Lgth.	Width	Height	Shpg. Wt. Lbs.	Price Each
SM-240-LB	2	60	12 3/8	8 3/16	45	**$28.99**

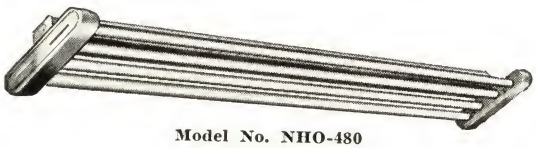
"Sunlighter" with Fluorescent Sun Lamp Centered between Lighting Tubes

Same specifications as SM-240, above, except that this fixture combines a 20-watt fluorescent sun lamp with two 48-inch lighting tubes, or 40-watt sun lamp with 60-inch lighting tubes. Highest quality illumination combined with health-giving radiations reproducing sun's most desirable ultra-violet rays. Cast over a wide area for all-day, room-wide use. Sun lamp produces Vitamin D in effective quantities. Lamp stays cool in operation. Especially suited for use in classrooms, gymnasiums, assembly halls, hospitals, offices, factories, bowling alleys. Price does not include sun lamp.

Cat. No.	Dimensions, Inches Length	Width	Height	Shpg. Wt. Lbs.	Price Each
SMS-240-20	48	12 3/8	8 3/16	36	**$32.36**
SMS-240-40	48	12 3/8	8 3/16	40	**35.12**

LEADER FLUORESCENT FIXTURES

FLUORESCENT COMMERCIAL "NEW HORIZON" OPEN-TYPE SLIMLINE FIXTURES



Model No. NHO-480

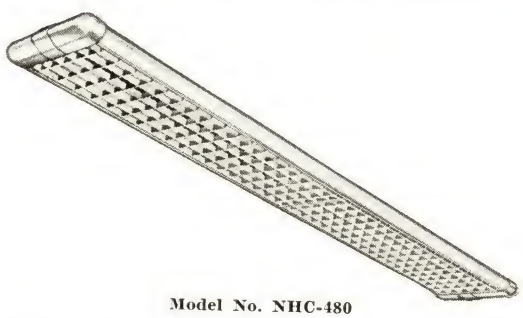
Widely used where mass lighting of merchandise is required. A fixture using a long, narrow lamp. Ingenious lamp holders featuring shake-proof, safety-factor chrome band enhance beauty of unit. Efficient operation and low maintenance cost.

Specifications: Housing and channel of 18 gauge steel. Over-all finish, white high-gloss baked enamel. Instant-start 120, 200, 300 and 425 milliampere operation. Conventional 110-115 volts 60 cycle A.C. Other voltages on request.

Cat. No.	Lights	Dimensions, Inches — Length	Width	Height	Shpg. Wt. Lbs.	Price Each
NHO-480	4	97 5/16	16 1/4	5 17/32	44	**$58.87**
NHO-380	3	97 5/16	10 1/4	5 17/32	47	**52.59**
NHO-280	2	97 5/16	10 1/4	5 17/32	41	**36.21**

Price is for 425 ma.

FLUORESCENT COMMERCIAL "NEW HORIZON" SLIMLINE SERIES FIXTURES



Model No. NHC-480

Used in commercial establishments where a distinctive and highly modern effect is desired. Moulded plastic louvers offer 45° or 31° shielding and provide maximum diffusion of efficient light from 8-ft. slimline lamps. Leader slimline units use one-piece steel channel embossed for rigidity and flush ceiling mounting.

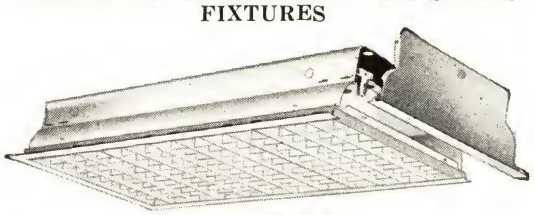
Specifications: Extruded translucent plastic side panels and moulded plastic louvers. Louvers swing down to right or left. End caps of deep-drawn steel. Entire unit is finished in white high-gloss baked enamel. Wire units include UL and ETL approved sockets and two high p.f. 2-lamp ballasts. Conventional 110-125 volts, 60 cycle A.C. Other voltages on request. Instant-start operation is a feature. Direclite spot light attachments available. Available for 120, 200, 300 and 425 milliampere operation.

Cat. No.	Lights	Dimensions, Inches — Length	Width	Height	Shpg. Wt. Lbs.	Price Each
NHC-480	4	101 1/4	16 1/4	5 17/32	58	**$96.23**
NHC-280	2	101 1/4	10 1/4	5 17/32	48	**58.51**

Price is for 425 ma. With 31° Louver.

LEADER FLUORESCENT FIXTURES

COMMERCIAL 24-INCH TROFFER SERIES FIXTURES



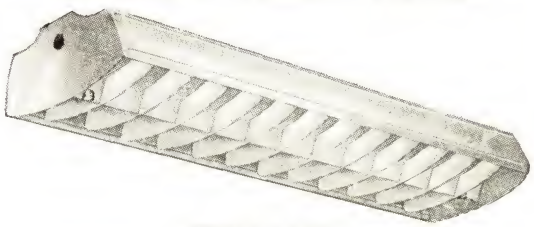
Model No. TWL-440

Illustrated is the 24-inch Troffer with steel egg-crate louver. This fixture is also available in open style (TW-440), baffled (TWB-440), or choice of flat diffusing glass enclosure (TWG-440), or Holophane lens (TWHG-440). May be had with moulded louver of destaticized plastic (TWLP-440). Available in both regular and shallow design for single or continuous row installation. Special hangers available.

Specifications: One-piece housing of 18 gauge steel. Exterior finished in aluminum gray baked synthetic enamel, interior in white, high gloss baked enamel. Finished with flange trim or with T-bar mounting construction. Wired units include UL and ETL approved high p.f. 2-lamp transformers and sockets, type FS easily replaceable starters. Conventional 110-125 volts, 60 cycle A.C. Other voltages on request. Also available for instant-start operation in regular height. Available, in regular height only, for use with Slimline lamps in 42-inch to 96-inch lengths.

Cat. No.	Lights	Dimensions, Inches: Lgth.	Width: T-Bar	Width: Flange	Height: Reg.	Height: Shal.	Shpg. Wt. Lbs.	Price Each
TWL-440	4	48	24	25 11/16	7 3/8	6	63	**$47.68**
TW -440	4	48	24	25 11/16	7 3/8	6	60	**38.90**
TWB-440	4	48	24	25 11/16	7 3/8	6	61	**40.34**
TWG-440	4	48	24	25 11/16	7 3/8	6	88	**47.68**

COMMERCIAL "VARSITY" FIXTURE



Model No. V-240

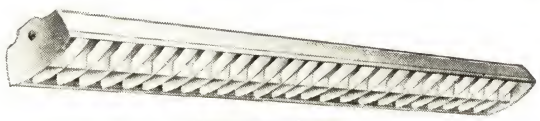
A combination of quality lighting and moderate price. Gives the abundance of direct and indirect light of a luxury-type fixture at comparatively low cost. Especially suited to use where "close-seeing" is a constant requirement such as in school rooms, libraries, over drafting-boards, etc.

Specifications: Housing and channel of 18 gauge steel. Entire unit finished in white, high-gloss baked enamel. Baffle type louvers (easily removable for servicing) achieve 25°-35° shielding. Other shielding angles available on request. Fixture can be installed single, or in continuous rows with no couplers needed. Wired units include UL and ETL approved sockets, type FS easily replaceable starters, and UL approved HPF brick-type ballasts. Conventional 110-125 volts, 60 cycle A.C. Other voltages and instant-start operation available on request. Unit may also be had with translucent plastic side panels at slight additional cost, No. VP-240.

Cat. No.	Lights	Dimensions, Inches: Length	Width	Height	Shpg. Wt.Lbs.	Price Each
V- 240	2	48	12 3/4	6 1/4	31	**$19.31**
VP-240	2	48	12 3/4	6 1/4	31	**20.96**

LEADER FLUORESCENT FIXTURES

COMMERCIAL SLIMLINE "VARSITY" FIXTURE



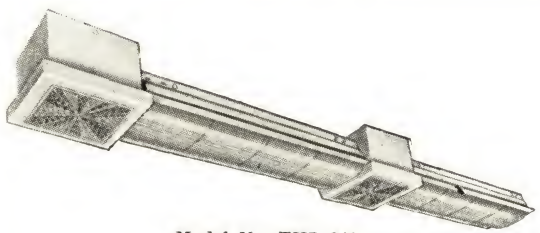
Model No. V-280

This model accommodates Slimline lamps in lengths up to 8 feet. Long fixtures obviously necessitate fewer fixtures for any given area — fewer to buy, to install, to lamp, to re-lamp. Both original and maintenance costs are held to a minimum. Slimline lamps provide instant-starting, choice of brightness levels, and single-pin bases for easy, quick re-lamping.

Specifications: Housing and channel of 18 gauge steel. Entire unit finished in white, high-gloss baked enamel. Baffle-type louvers (easily removable for servicing) achieve 25°-35° shielding. Other shielding angles on request. Fixture can be installed singly, or in continuous runs with no couplers needed. Instant-start 120, 200, 300 and 425 milliampere operation. Uses either T-8 or T-12 75-watt Slimline lamps. Wired units include UL and ETL approved sockets and high p.f. ballasts. Unit may also be had with translucent plastic side panels at slight additional cost, No. VP-280.

Cat. No.	Lights	Dimensions, Inches: Length	Width	Height	Shpg. Wt.Lbs.	Price Each
V -280–425	2	96 3/32	12 3/4	6 1/4	65	**$44.52**
VP-280-425	2	96 3/32	12 3/4	6 1/4	65	**47.83**

RECESSED TROFFERS WITH CONTROLENS



Model No. THL-240

Unit shown above with incandescent unit (Model TH-105). Affords efficient controlled-quality lighting for offices, schools, stores, banks, libraries, with a minimum of shadows and absence of direct glare. Also available as a surface mounted unit (Model No. THLC-240, or as 12-inch Trofferlite (Model No. THG-240).

Specifications: Housing and channel of 18 gauge steel. Interior finished in white high-gloss baked enamel. Exterior housing is finished in aluminum-gray baked synthetic enamel. Wired units include UL and ETL approved high p.f. 2-lamp ballasts and sockets, type FS easily replaceable starters. Conventional 110-125 volts 60 cycle A.C. Other voltages on request. Instant-start operation available. For 1, 2 or 3 40-watt lamp operation. Length 48 inches. Also available for Slimline tubes in lengths up to 96 inches.

Cat. No.	Lights	Width, In.: Width	With Trim	Height Overall	Re-cess Reg.	Depth Shal-low	Shpg. Wt. Lbs.	Price Each
THL-240	2	13 3/4	15 1/4	9 3/8	7 1/8	6	53	**$46.37**
THG-240	2	12	13 11/16	.....	7 3/8	6	50	**36.09**

LEADER FLUORESCENT FIXTURES
RECESSED TROFFERS



Model No. T-240

Available with or without flange trim, and for T-Bar steel channel or wood furring mounting. A versatile fluorescent fixture, to be used singly or in continuous rows. The easily removable reflector provides quick accessibility to all auxiliaries. Special hangers may be ordered for any type of ceiling construction. Furnished in 12-inch, 24-inch and shallow-type fixtures.

Specifications: Housing and channel of 18 gauge steel. Interior finished in white high-gloss enamel. Exterior finished in aluminum-gray baked synthetic enamel. Fixtures furnished as open (T-240), glass enclosed (TG-240), baffled (TB-240) or louvered (TL-240). Wired units include UL and ETL approved high p.f. 2-lamp transformers and sockets, type FS easily replaceable starters. Conventional 110-125 volts 60 cycle A.C. for 1, 2 or 3 40-watt lamps. Other voltages on request. Instant-start operation available. Length 48 inches.

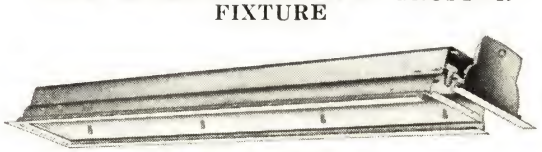
Cat. No.	Lights	Width, In. T-bar	Width, In. Flange	Height, In. Regular	Height, In. Shallow	Shpg. Wt.Lbs.	Price Each
T-140	1	12	13 11/16	7 3/8	6	31	**$20.98**
T-240	2	12	13 11/16	7 3/8	6	33	**22.44**
T-340	3	12	13 11/16	7 3/8	6	41	**28.43**

Low Surface Brightness Troffer Unit

Same as recessed troffer above, except that fixture has no louvers or other shielding, so that light is used to the fullest. Yet there is complete seeing comfort to the eye. No glare. Uses two T-17 lamps for low surface-brightness. Alzac liners available if desired. Length 60 inches. Available in regular height only.

Cat. No.	Lights	Width, In. T-bar	Width, In. Flange	Hgth, In. Regular	Shpg. Wt.Lbs.	Price Each
T-240-LB	2	12	13 11/16	7 3/8	52	**$31.05**

"NEW HORIZON" SLIMLINE TROFFER FIXTURE



Model No. NHT-280

The New Horizon Troffer is engineered to utilize the manifest advantages of Slimline lamps and afford new facilities for modern designing and architecture. New Horizon Slimline units offer many advantages in efficiency of operation, low maintenance cost and versatility of surface brightness with better redirection of light flux and higher light values.

Specifications: One, two or three 96-inch Slimline tubes. Housing and channel of 18 gauge steel. Finished in white high-gloss baked enamel. Instant-start 100, 120, 200, 300 and 425 milliampere operation. Regular conventional 110-125 volts 60 cycle A.C. Other voltages on request. Length 96 inches.

Cat. No.	Lights	Width, In. Without Flange	Width, In. With Flange	Height, In. Regular	Height, In. Shallow	Shpg. Wt. Lbs.	Price Each
NHT-280	2	12	13 11/16	7 3/8	6	66	**$52.00**

Price is for 425 Ma.

LEADER FLUORESCENT FIXTURES
STRIP LIGHTING FIXTURES



Model No. NHS-180

Furnished with or without reflector. Offers high lighting efficiency and low cost. Strictly a utility fixture, with one-piece grooved channel for adjustable sliding clamp hangers.

Specifications: 18 gauge steel one-piece channel. Units completely wired and ready to install include UL and ETL approved 95% p.f. corrected ballasts and sockets. Instant-start operation. Conventional 110-125 volts 60 cycle A.C. Wired for one, two or three Slimline tubes (Model No. NHS-280 for two tubes, and Model No. NHS-380 for three tubes). 120, 200, 300 and 425 milliampere operation. Strip lights also furnished for 20-watt (Model No. S-120), 30-watt (Model No. S-130) or 40-watt (Model No. S-140) operation.

Cat. No.	Lights	Dimensions, Inches—Length	Width	Height	Shpg. Wt.Lbs.	Price Each
NHS-180	1	96	4 1/4	4 9/16	21	**$25.58**
NHS-280	2	96	13 1/4	5 1/4	27	**33.79**
NHS-380	3	96	13 1/4	5 1/4	35	**48.78**
Above prices for 425 ma.						
S-120LPF	1	24	2 1/2	1 5/8	8	**3.61**
S-120HPF	1	24	2 1/2	2	8	**7.05**
S-130LPF	1	36	2 1/2	2	9	**5.70**
S-130HPF	1	36	2 1/2	2	9	**9.09**
S-140LPF	1	48	2 1/2	2	10	**5.95**
S-140HPF	1	48	2 1/2	2	10	**9.86**

INDUSTRIAL "STRATOLINER" SERIES



Model No. IUO-340

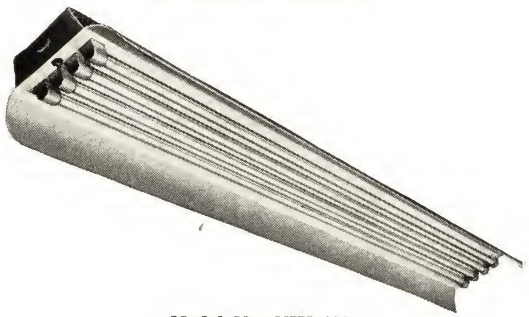
A heavy-duty lighting unit with all auxiliary equipment enclosed in an accessible, roomy channel. May be mounted singly or in continuous rows. Ideal for either direct to ceiling or suspension mounting. Stratoliner closed end design (IUP-340) gives highest degree of lamp shielding.

Specifications: Two or three 40-watt T-12 fluorescent lamps (also available for 100-watt T-17 lamps (IUO-2100 and IUP-2100). Housing and channel of 20 gauge steel. Housing and exterior finished in gray baked enamel. Reflector finished in a choice of white baked enamel (IUOL series) or porcelain enamel (IUOP series). Units completely wired and ready to install include 95% p.f. corrected UL and ETL approved ballasts, twist-lock or turret type sockets (prices include turret sockets), and replaceable starters. Conventional 110-125 volts 60 cycle A.C.

Cat. No.	Lights	Dimensions, Inches—Length	Width	Height	Wt.Lbs.	Price Each
		Enamel Finish				
IUOL-240	2	51	13 3/4	6 7/16	32	**$19.53**
IUOL-340	3	51	13 3/4	6 7/16	34	**25.73**
IUOL-2100	2	61 3/8	13 3/4	6 7/16	45	**31.11**
		Porcelain Finish				
IUOP-240	2	51	13 3/4	6 7/16	33	**20.69**
IUOP-340	3	51	13 3/4	6 7/16	35	**28.05**
IUOP-2100	2	61 3/8	13 3/4	6 7/16	46	**34.63**
		Closed End				
IUP-240	2	53 13/16	13 3/4	6 7/16	35	**24.99**
IUP-340	3	53 13/16	13 3/4	6 7/16	37	**31.18**
IUP-2100	2	65 13/16	13 3/4	6 7/16	49	**40.22**

LEADER FLUORESCENT FIXTURES

INDUSTRIAL "NEW HORIZON" SLIMLINE SERIES



Model No. NHI-480

A heavy-duty fluorescent unit that provides exceptionally high light intensity and streamlined styling. Easy installation, low operation and maintenance cost are desirable features. Constructed for continuous run wireway installations.

Specifications: One-piece channel and reflectors of 20 gauge steel. Reflector is furnished in two sections. Channel and reflector top surface finished in gray baked enamel. Reflector interior surface finished in white high-gloss baked enamel. (Porcelain reflectors also available.) Units completely wired and ready to install include 95% corrected p.f. ballasts, UL and ETL approved sockets. Instant-start operation is featured. Available for 120, 200, 300 and 425 milliampere operation. Conventional 110-125 volts 60 cycle A.C. Other voltages on request.

Cat. No.	Lights	Dimensions, Inches—Length	Width	Height	Shpg. Wt.Lbs.	Price Each
NHI-280	2	96 1/16	13¼	6½	32	**$42.31**
NHI-480	4	96 1/16	13¼	6½	43	**64.98**

Price is for 425 ma.

INDUSTRIAL "ZEPHYRLITE" FIXTURES



Model No. ZUO-240

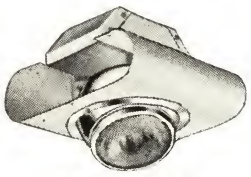
A fixture in which advanced design and engineering provide the utmost strength and rigidity. For mounting direct to ceiling, or suspended either as individual units or in continuous rows. Closed end "Zephyrlite" (ZIU for 2-lamp operation) meets specialized lighting requirements where concentrated high level illumination is desired.

Specifications: 20 gauge all-steel deep drawn channel housing, for use with sliding clamp hangers. Channel and reflector top surface finished in gray baked enamel. Reflector finished in double coated white baked enamel, ZUOL series (or in porcelain, ZUOP series). Units completely wired and ready to install include UL and ETL approved 95% p.f. corrected ballasts, turret type sockets, and replaceable starters. Conventional 110-125 volts 60 cycle A.C. Other voltages on request. Also available for instant-start operation.

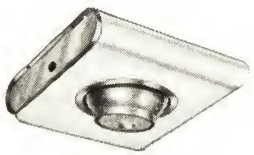
Cat. No.	Lights	Dimensions, Inches—Length	Width	Height	Wt.Lbs.	Price Each
		Enamel Finish				
ZUOL-240	2	51	13½	6 13/16	26	**$18.68**
ZUOL-340	3	51	13½	6 13/16	29	**24.84**
		Porcelain Finish				
ZUOP-240	2	51	13½	6 13/16	27	**19.80**
ZUOP-340	3	51	13½	6 13/16	30	**25.99**

LEADER INSERT AND CORNER BOX UNITS

ADJUSTABLE "DIRECLITE" SPOTLIGHT ATTACHMENT



Model No. IS-2



Model No. CS-2



Model 4WS-2

Use of the "Direclite" spotlight brings greatly increased sales appeal through effective highlighting of merchandise. Available for 2-, 3- and 4-light fixtures, and can be installed either at the end of the single unit, between units in a continuous run or at inter-sections of continuous rows. For use with VL, NHC and NHO type fixtures. Furnished with flat glass or metal cover or curved type controlens.

Cat. No.	For Use With	Dimens, Inches L.	W.	H.	Shpg. Wt.Lbs.	Price Each
IS-2	2- or 3-lamp units	10	10 3/16	5 17/32	4	**$12.42**
IS-4	4-lamp units	10	16 3/16	5 17/32	5	**13.25**
CS-2	2- or 3-lamp units	10 3/16	10 3/16	5½	6	**18.22**
CS-4	4-lamp units	16 3/16	16 3/16	5½	8	**19.46**
4WS-2	2- or 3-lamp units	10 3/16	10 3/16	5 17/32	4	**21.94**
4WS-4	4-lamp units	16 3/16	16 3/16	5 17/32	5	**23.18**
ES-2	2- or 3-lamp units, 2 end cap	12	10 3/16	5 17/32	4	**11.99**
ES-4	4-lamp units. 1 end cap	12	16 3/16	5 17/32	5	**12.82**
S-2	2- or 3-lamp units, 2 end caps	14	10 3/16	5 17/32	4	**12.01**
S-4	4-lamp units, 2 end caps	14	16 3/16	5 17/32	5	**12.83**

LEADER CEILING OR SUSPENSION MOUNTINGS



C-100



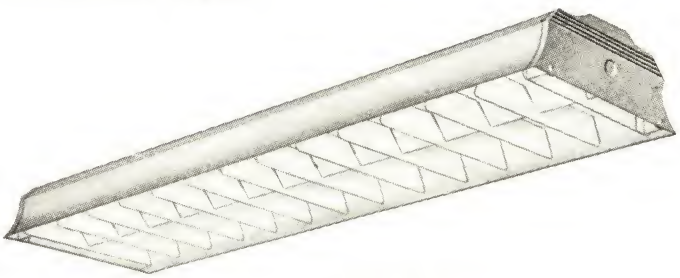
C-210
Twin Stem

Hangers provide easy installation and maximum adjustment. Twin stem and canopy assembly (C-210) includes two 24-inch stems. Single stem and canopy assembly (C-100) includes one 24-inch stem.

Cat. No.	Description	Price Each
C-210	Twin Stem and Canopy Assembly....	**$2.67**
C-100	Single Stem and Canopy Assembly....	**1.40**

ELECTRO FLUORESCENT FIXTURES

"Twenty-Twenty"
(2 LIGHT 40 WATT)



MODEL 2020

Designed for schools, offices and institutions, the "Twenty-Twenty" gives high efficiency, safety and ease of maintenance — at low cost. Cut-off specifications 35°-25° with approximately 60% of light directed downward, 40% directed upward, for even distribution without shadows. Easy to install — louver panel is in one complete section, hinges from either side and can be completely removed without nuts, bolts or other special attachments. Available for individual or continuous, surface or pendant mounting. When pendant mounted, takes single or double stem. Side panels available in durable plastic or metal.

Skyliner
(2 LIGHT AND 4 LIGHT 40 WATT)



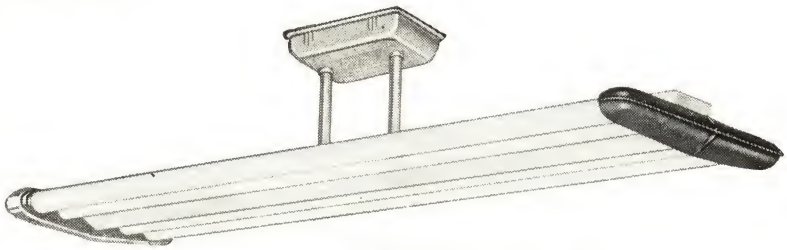
MODEL 1022—2 LIGHT
MODEL 1044—4 LIGHT

A slender "Wafer of Light," streamlined, compact, marvelously efficient, easily serviced. Their slender design makes these fixtures attractive on low as well as high ceilings where bulkier fluorescent look cumbersome. End crowns available in rich" Walnut Grain" or gleaming "Tile White" plastic. Available for individual or continuous installation; surface or pendant mounting.

Model **1022**—2 Light (Basic Unit 1020 Kit 22.

Model **1044**—4 Light (Basic Unit 1040 Kit 4)

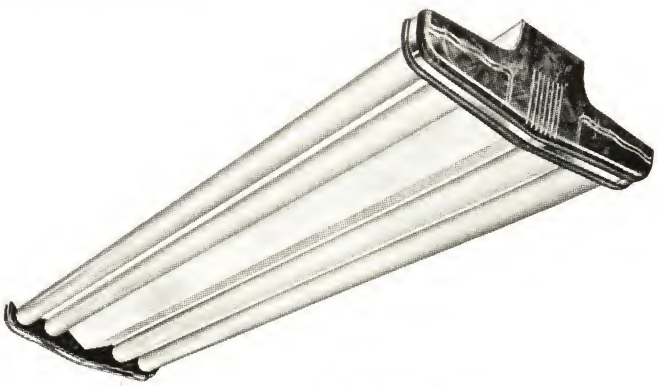
Skyliner Suspended Models
(40 WATT)



MODEL 1022P—2 LIGHT
MODEL 1044P—4 LIGHT

The pendant mounted models of the Skyliners described above. The handsome walnut grained bakelite ends give that "aircraft" streamlined effect. End crowns also available in gleaming "Tile White" plastic. Streamlined, compact and efficient, easily serviced. Lamps are inserted from the top.

Electro Royal



MODEL 1047
Four Lamp 40 Watt
(No. 1040 Basic Unit)
+ Kit No. 7

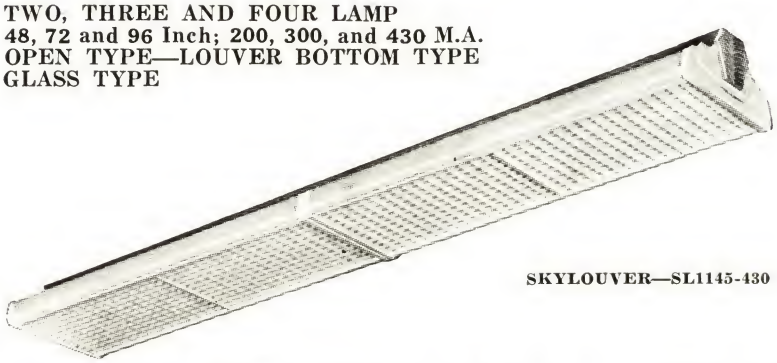
End crowns of rich, 'Walnut-Grain" or gleaming "Tile-White' plastic trimmed in chrome and in either flush or pendant mountings. Note how snugly the end crowns fit on the Electro Royal. All unsightly sockets and ends of bulbs are completely encased so that only slim lines of smooth light are visible from every viewing angle.

Masterfully designed and engineered for beauty and simplicity. All bulbs are replaced without removing end-caps. Takes 40-watt T12 48-inch fluorescent lamps.

ELECTRO FLUORESCENT COMMERCIAL FIXTURES

ELECTRO SLIMLINER SERIES

TWO, THREE AND FOUR LAMP
48, 72 and 96 Inch; 200, 300, and 430 M.A.
OPEN TYPE—LOUVER BOTTOM TYPE
GLASS TYPE



SKYLOUVER—SL1145-430

All Slimline channels are made of heavy gauge metal. Channels constructed to provide continuous wireway for interconnected units, and completely encloses all operating equipment. All fixtures are completely wired and ready for use.

All fixtures can be surface and pendant mounted. Single unit and continuous installation. For pendant mounting order two kit No. S (single stem hanger complete with canopy) per eight foot section.

All Slimline fixtures available in 48 inch, 72 inch, and 96 inch sizes. All sizes have same dimensional cross-section, facilitating ease of filling out continuous rows. All single-pin base instant start.

All Electro Slimline fixtures are available in two, three and four lamp series. The Louver bottom and glass bottom fixtures are easily serviced by dropping hinged basket from either side.

Skyray Series: Framed bottom panels of flawless ribbed glass. Alba glass available at slight additional cost.

Spot-Light Boxes are available for in-line, corner and "X" pattern mounting for all fixtures. Takes PAR 38 side prong lamp.

Lamp Series	Lgth.	SKYLOUVER Cat. No.	SKYLOUVER Less Lamps	SKYRAY Cat. No.	SKYRAY Less Lamps
2	48″	**SL1025-430**	$.....	**SL1026-430**	$.....
3	48″	**SL1035-430**	.....	**SL1036-430**	.....
4	48″	**SL1045-430**	.....	**SL1046-430**	.....
2	96″	**SL1125-430**	.....	**SL1126-430**	.....
3	96″	**SL1135-430**	.....	**SL1136-430**	.....
4	96″	**SL1145-430**	.....	**SL1146-430**	.....

SKYLOUVER AND SKY-RAY SERIES
MATCHING 2, 3 AND 4 LIGHT IN 20 AND 40 WATT SIZES



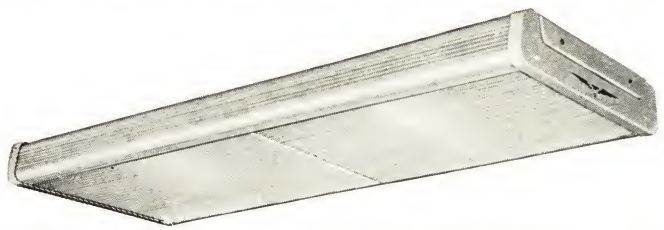
Louver is held in a metal, basket-like, hinged frame that permits exceptionally low cost maintenance. Readily removable for quick, easy cleaning. Crescent shaped side panels are available in ribbed plastic or metal. Surface or Pendant mounted.

All models are used for Individual or Continuous row installation without the addition of extra parts. Available in 20-watt and 40-watt sizes.

SKYLOUVER — Outstanding Electro engineering and ingenuity, combined with the latest development in modern plastic molding, offers a wafer-thin, extremely shallow type louvered luminaire.

This revolutionary louver with apertures, 1 x 1½ inches, molded of heat-resisting, nonwarping, durable Lustrex, provides a cut-off of 45° crosswise and 37° lengthwise.

No.	Description	Price
1025	2-lt 40 w. (1020 Basic + Kit No. 25)	$.....
1035	3-lt 40 w. (1030 Basic + Kit No. 35)	.....
1045	4-lt 40 w. (1040 Basic + Kit No. 5)	.....



Ribbed glass panels are held in metal, basket-like, hinged frame permitting exceptionally low cost maintenance. Readily removable for easy cleaning. Crescent shaped side panels are gracefully designed of sturdy ribbed plastic.

All models may be used for Individual or Continuous row installation without the addition of extra parts. Available in 20-watt and 40-watt.

SKY-RAY — Another new wafer-thin, extremely shallow type glass and plastic luminaire. Bottom panels of ribbed diffusing glass provide maximum light transmission without glare and with low surface brightness. (Alba glass available at slightly higher cost.)

Completely wired and ready for use. Available either in surface or pendant mounted models.

No.	Description	Price
1026	2-lt 40 w. (1020 Basic + Kit No. 26)	$.....
1036	3-lt 40 w. (1030 Basic + Kit No. 36)	.....
1046	4-lt 40 w. (1040 Basic + Kit No. 6)	.....

ELECTRO INDUSTRIAL LUMINAIRES

OPEN END MODELS

FOR 40 AND 85 WATT LAMPS and SLIMLINE

RLM



For Individual or Continuous Installation

No. B101—2-40 Watt Fixture with Synthetic Enameled Open End Reflector

Overall length 52¼ inches. Width of reflector, 13½ inches. Depth overall, 6⅝ inches. Net weight, 28 lbs.

Reflector surface white "Liquid Plastic". Outside finish grey "Liquid Plastic". Channel heavy 20 gauge metal for lifetime use. Has "Lock-Latch" fastener that permits secure attachment of reflector to channel without scratching. No loose nuts, bolts, etc. Operates 110-125 volts, 60 cycle, A.C. only. Couplers joint any number of units.

..... less lamps $.....

No. B101P—2-40 Watt Fixture with Porcelain Enameled Open End Reflector

Same specifications as No. B101. Net weight, 30.

..... less lamps $.....

No. B105—3-40 Watt Fixture with Synthetic Enameled Open End Reflector

Same specifications as No. B101 except for three lamps. Net weight, 33 lbs.

..... less lamps $.....

No. B105P—3-40 Watt Fixture with Porcelain Enameled Open End Reflector

Same specifications as No. B101 except for three lamps. Net weight, 35 lbs.

..... less lamps $.....

No. B201—2-85 Watt Fixture with Synthetic Enameled Open End Reflector

Overall length, 65 inches; width of reflector, 16½ inches; depth overall, 7¾ inches. Net weight, 51 lbs. Other features same as B101.

..... less lamps $.....

No. B201P—2-85 Watt Fixture with Porcelain Enameled Open End Reflector

Same specifications as No. B201. Net weight, 56 lbs. ..... less lamps $.....

All above available in closed end reflectors.

SLIMLINE INDUSTRIALS

SL4248-2-48-430 ma with Synthetic enamel open end reflector ..... $.....

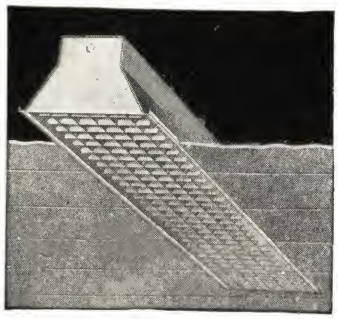
SL4248P same as above with Porcelain enamel open end reflector..... .....

SL4296-2-96-430 ma with Synthetic enamel open end reflector..... .....

SL4296P same as above with Porcelain enamel reflector ....

3-lamp 48 and 3-lamp 96 also available.

ELECTRO COMPLETE TROFFER LINE



Open Bottom Type—Basic unit that can later be converted to louver or glass bottom types. Fixture complete with sockets, ballasts, and all other electrical components wired and installed, ready for immediate service.

Louver Bottom Type—Basic unit plus hinged louver bottom panel accessories. Can be ordered as complete louver bottom fixture or can convert open bottom type by addition of louvered bottom accessories. Louver hinges from either end of fixture to provide immediate access to lamps or wireway. One louver panel made of heavy gauge steel, die formed and welded for strength. One piece hinged louver provides for exceptionally low cost maintenance. Excellent visibility and eye protection afforded by 35 degree cut-off longitudinally and cross-wise.

Spotlights—Available for in-line, end of row or corner lighting. Fits 12 in. square opening in ceiling. Available for flange or flush type mounting. Takes standard par 38 150 watt spot or flood incandescent lamp.

Glass Bottom Type—Basic unit plus hinged glass bottom panel accessories. Can be ordered as complete glass bottom fixture or can convert open bottom type by addition of hinged glass bottom accessories. One piece Corning Albalite Glass panel framed in metal to afford maximum protection and also ease of maintenance. Piano hinge permits instant access to lamps and channel wire-way. Albalite Glass panel is easy to clean with a damp cloth and does not finger-mark. Transmission factor 75 per cent for glass panel is maintained with absolute uniformity over the entire area of the glass.

Installation Information—Each fixture can be used for individual or continuous run. No additional couplers or brackets are necessary. End plate is combination end-joiner plate. For continuous mounting simply remove top section of end plate and then butt fixtures together. Held in rigid line with 10/32 machine screws. All troffers, 20 watt, 30 watt, 40 watt and slimline have same dimensional cross-sections and can be used interchangeably in continuous combinations or to complete rows. Body provided with ⅞ in. knockouts located throughout channel for convenient service connections.

Cat. No.	Description	Less Lamps
TG2240	2-lamp, 40-watt Alba Glass Bottom Troffer	.....
TG2340	3-lamp, 40-watt ditto.....	.....
TG3240	2-lamp, 40-watt Louver Bottom Troffer	.....
TG3340	3-lamp, 40-watt ditto.....	.....
	Slimline	
TSL4248-2G	2-lamp, 48-inch, 430 MA Alba Glass Bottom Troffer	.....
TSL4296-2G	2-lamp, 96-inch ditto.....	.....
TSL4248-3G	2 lamp, 48-inch, 430 MA Louver Bottom Troffer	.....
TSL4296-3G	2-lamp, 96-inch ditto.....	.....

MARKSTONE FLUORESCENT FIXTURES

WALDORF 3—20 WATT LAMPS



Open Lamp Type

Markstone's flush or surface mounted fixtures may be installed completely assembled—lamp and all—in three easy steps:

1. Attach hanger bar firmly to stud.
2. Attach one side of completely assembled fixture to bar with machine screw while making wire connections.
3. Slide fixture over bar and insert second screw. Press fixture to ceiling while firmly tightening screws.

The Waldorf is also made with 4-inch adapter, cord and plug, or for semi-flush hanging with canopy and strap. Single 18-inch stem and 6-inch canopy is available for pendant mounting.

All fixtures fully U.L. Approved.

The Waldorf in the 20 Watt sizes listed, are for use only on 115-120 volt, 60 cycle A.C. Steel reflector has hard, baked-on, chip-proof white enamel finish. Streamlined, high-polish chrome-like aluminum ends in choice of colors. Colored ends are of plated, permanent finish. The fixture is 9½ inches wide, 26 inches long and $3\frac{5}{16}$ inches deep exclusive of hanger assembly.

Open Lamp Type

Cat. No.	Description	Shpg. Wt. Lbs.	Price Each
1320	4″ Adapter, Cord and Plug, Chrome Finish Ends	8¼	**$14.45**
***1320**	4″ Adapter, Cord and Plug, Colored Ends	8¼	**14.45**
1326	6″ Canopy and Hanger Bar, Chrome Finish Ends	8¼	**14.45**
***1326**	6″ Canopy and Hanger Bar, Colored Ends	8¼	**14.45**
FL1320	Flush or Surface Mounting, Chrome Finish Ends	9	**15.45**
***FL1320**	Flush or Surface Mounting, Colored Ends	9	**15.45**

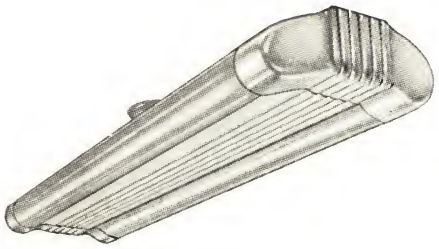
Shielded Lamp Type

S1320–2	4″ Adapter, Cord and Plug, Chrome Finish Ends	8½	**18.95**
***S1320–2**	4″ Adapter, Cord and Plug, Colored Ends	8½	**18.95**
S1326–2	6″ Canopy and Hanger Bar, Chrome Finish Ends	8½	**18.95**
***S1326–2**	6″ Canopy and Hanger Bar, Colored Ends	8½	**18.95**
FLS1320–2	Flush or Surface Mounting, Chrome Finish Ends	9½	**19.95**
***FLS1320–2**	Flush or Surface Mounting, Colored Ends	9½	**19.95**

*Color End Caps available in gold, blue, Chinese red and rose. Specify color desired, when ordering.

MARKSTONE FLUORESCENT FIXTURES

VALUE-LITE—2—20 WATT LAMPS



A beautifully designed and carefully finished 2-light fluorescent. The practical, common sense design is equally at home in any room.

Finished all over in chip-proof white Porcelite enamel that wipes clean in an instant, the VALUE-LITE is designed in perfect symmetry, with a gracefully embossed reflector between the lamps. All sockets are concealed.

Two models: with 4-inch adapter, cord and plug; and with 6-inch fitter for permanent flush hanging. Both models U.L. Approved. Fully covered by design and mechanical patents. Both models 2¼ inches deep, exclusive of hanger assembly. White finish ends.

Open Lamp Type Cat. No.	Shpg. Wt. Lbs.	Price Each	Shielded Lamp Type Cat. No.	Shpg. Wt. Lbs.	Price Each
Regular Start 4-inch Adapter, Cord and Plug					
9220	6	**$ 8.35**	**S9220–2**	10¼	**$10.80**
Regular Start 6-inch Canopy and Hanger Bar					
9226	6	**8.35**	**S9226–2**	10¼	**10.80**

DRAKE COMMERCIAL SERIES

2 Lamp 40 Watt Regular Start Fluorescent
U.L. Approved—White Porcelite Enamel Finish



Open Lamp Type

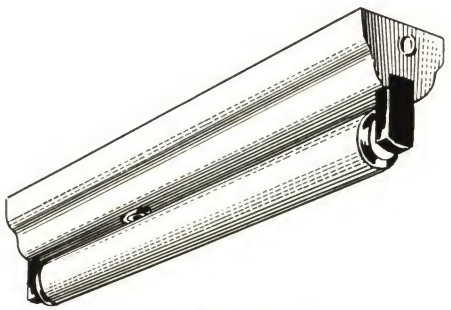
Commercials in Colors — gracefully rounded, modernistic fluorescent streamlining featuring "just the right color" to fit in with office, beauty shop, gift shop, retail stores, etc. Uniquely styled in Chrome, Gold or colorful Chinese Red, Blue or Rose. A new trend in commercial lighting scientifically designed and engineered to light ceiling, walls, and floor—giving full room illumination. HPF Approved.

Open Lamp Type Cat. No.	Shpg. Wt. Lbs.	Price Each	Ends	Shielded Lamp Type Cat. No.	Shpg. Wt. Lbs.	Price Each
Flush or Surface Mounting						
FL1240	18	**$22.70**	Chrome	**FLS1240-2**	20	**$30.40**
***FL1240**	18	**22.70**	Colored	***FLS1240-2**	20	**30.40**
Double Stem and Canopy						
C4240	22	**24.75**	Chrome	**CS4240-2**	22	**33.20**
***C4240**	22	**24.75**	Colored	***CS4240-2**	22	**33.20**

*Specify color desired when ordering.

MARKSTONE FLUORESCENT FIXTURES

CHANNEL 1 LAMP TYPE



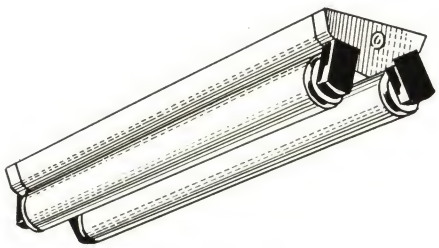
Open Lamp Type

White porcelite enamel finish. All U.L. Approved. All models ideal for end to end joining to form continuous runs.

—Open Lamp Type— Cat. No.	Shpg. Wt. Lbs.	Price Each	Lamps	Shielded Lamp Type Cat. No.	Shpg. Wt. Lbs.	Price Each
6114	3¼	$ 4.35	1-14W LPF	6114-2	4¾	$ 7.40
6115	3½	4.35	1-15W LPF	6115-2	5	7.40
6120	4	4.35	1-20W LPF	6122	5¼	7.40
HPF6120	5	8.05	1-20W HPF	HPF6122	6¾	14.45
6125	5¾	6.55	1-25W LPF	6125-2	8½	14.75
6130	6¾	7.00	1-30W LPF	6132	9¾	16.35
6140	8	7.00	1-40W LPF	6142	11	16.35
HPF6140	10¼	11.10	1-40W HPF	HPF6142	13¾	20.15
HPF6140X	15	18.65	(‡)	HPF6142X	20	37.20

‡2—1 Lamp 40 Watt 48"—Channels wired in tandem to make 96 inch unit. Uses 1—2/40 HPF Ballast Shielded type furnished with 1 Pair End Caps and End-to-End Lok Connector. Packed 2 to a carton. Shields packed separately.

CHANNEL 2 LAMP TYPE COMMERCIAL SERIES



Open Lamp Type

Lifetime chip-proof white Porcelite enamel finish—durable, easy to clean. Four popular sizes —adaptable for any type of hanging.

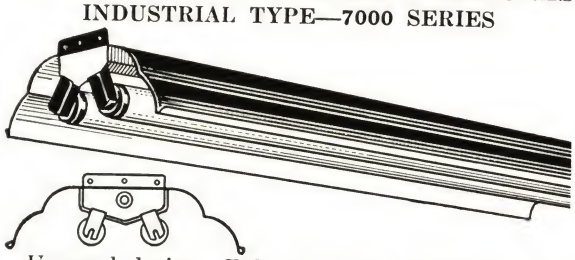
Channel packed 2 in a shipping carton; shields and End Caps 1 set to shipping carton.

—Open Lamp Type— Cat. No.	Shpg. Wt. Lbs.	Price Each	Lamps	Shielded Lamp Type Cat. No.	Shpg. Wt. Lbs.	Price Each
6214	5¾	$ 7.20	2-14W LPF	6214-2	6½	$13.70
6215	6	7.20	2-15W LPF	6215-2	6¾	13.70
6220	6½	7.20	2-20W LPF	6222	7¼	13.70
6225	7	12.80	2-25W	6225-2	8¼	18.80
HPF6240	10½	15.45	2-40W HPF	HPF6242	12½	29.60
0-6240	11	20.00	2-40W	0-6242	13	34.40

All above with Regular Start except 0-6240 and 0-6242 with Instant Start.

MARKSTONE FLUORESCENT FIXTURES

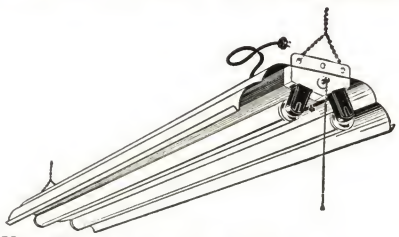
INDUSTRIAL TYPE—7000 SERIES



Unusual design. Full 13½-inch reflector on 40 watt sizes, only 4 inches deep. Top of reflector distinctively pleasing hammerloid green finish. U.L. Approved. Reflector finished in gleaming white porcelite enamel.

Cat. No.	Description	Shpg. Wt. Lbs.	Price Each
7000	For use with 2–40 watt Lamps	18	$17.65
7000X	For use with 2–40 watt Lamps. Complete with 6 ft. Type SJ Cord and plug and 10 ft. of "Jack" Chain	18½	19.10
7020	For use with 2–20 watt Lamps	9	9.45
7020C	For use with 2–20 watt Lamps. Complete with Cord and Plug	9½	9.90
	Heavy Duty 3 Lamp Type, U.L. Approved		
7340	For use with 3–40 watt Lamps	28	23.90

WORKLITE AND LAUNDRILITE



The Worklite, a portable light of many uses—in the workshop, over the workbench—in garages —on the farm — in the tool shed — playroom, utility room—in fact can be utilized wherever an efficient, inexpensive, easy-to-hang, portable fluorescent light is needed.

All white porcelite enamel finish. Complete with pull switch, 6 feet of heavy rubber covered cord and plug, 5 feet of hanging chain. Ready to hang and light. Underwriters' Laboratories, Inc., approved.

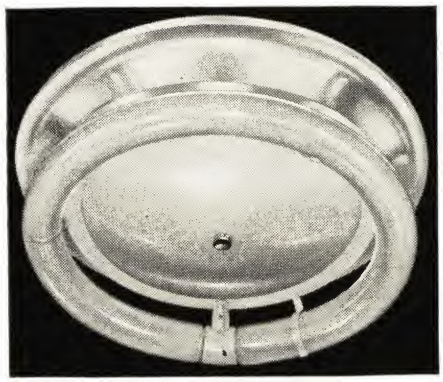
Cat. No.	Description	Shpg. Wt. Lbs.	Price Each
7025-WL	Worklite—for use with 2-25 watt Krypton Lamps	12½	$16.10
*L7025-WL	Worklite — complete with 2-25 watt Krypton Lamps	13½	18.60
7025-LL	Laundrilite — for use with 2-25 watt Krypton Lamps	12½	16.10
*L7025-LL	Laundrilite—complete with 2-25 watt Krypton Lamps	13½	18.60
7020-LL	Laundrilite — for use with 2-20 watt Lamps	9½	13.20
*L7020-LL	Laundrilite— complete with 2-20 watt Lamps	10½	15.45

*Federal Excise Tax on List Price of Lamps must be added.

MARKSTONE FLUORESCENT FIXTURES

INSTANT START CLASSIC CIRCLINE

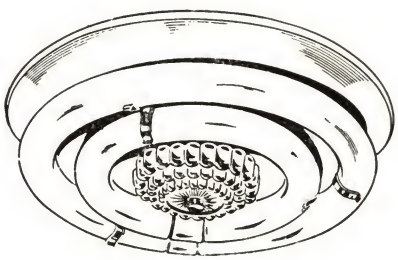
Equipped with G.E. Ballast



Instant start — no starter required. An attractive, simple design of universal appeal. Choice of triple enamel finish. All models U.L. Approved. Available with or without 32-watt General Electric Circline lamp. Each fixture is individually packed in a cushioned carton designed to assure delivery to its final destination in perfect condition.

Cat. No.	Description	Shpg. Wt. Lbs.	Price Each
L-500	White Porcelite Enamel Finish	7½	**$10.65**
L-500-IV	Ivory Porcelite Enamel Finish	7½	**11.25**
L-500-C	Triple Chrome Plate Finish	7½	**12.25**

INSTANT START TWO LIGHT CIRCLINE



For one 12-inch 32-watt lamp, Instant Start and one 8-inch 22-watt lamp, Regular Start.

Cat. No.	Description	Shpg. Wt. Lbs.	Price Each
L-850-IS	White Porcelite Enamel Finish with Crystal Center Ornament	8½	**$7.68**
L-850C-IS	Triple Chrome Plate Finish with Crystal Center Ornament	8½	**8.17**
L-855-IS	White Porcelite Enamel Finish with 13 inch Glass Bowl	10¾	**10.17**
L-855C-IS	Triple Chrome Plate Finish with 13 inch Glass Bowl	10¾	**10.69**

MARKSTONE IMPERIAL CHROME BRACKET



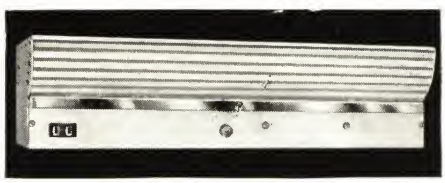
The Imperial Chrome Bracket—with Decorative Cut Glass effect shield, contoured, which permits easy focusing.

Cat. No.	Description	Length, Inches Bracket	Glass	Price Each
GS-5114C	14W Bracket with Switch	17	18	**$8.20**
GS-5114CO	14W Bracket with Switch and Convenience Outlet	17	18	**8.60**
GS-5115C	15W Bracket with Switch	20	21	**8.40**
GS-5115CO	15W Bracket with Switch and Convenience Outlet	20	21	**8.90**
GS-5120C	20W Bracket with Switch	26	27	**10.10**
GS-5120CO	20W Bracket with Switch and Convenience Outlet	26	27	**10.75**
GS-14	Glass Shield for 14W Bracket	....	18	**2.80**
GS-15	Glass Shield for 15W Bracket	....	21	**2.80**
GS-20	Glass Shield for 20W Bracket	....	27	**3.90**

Brackets are packed in individual boxes. Standard package is 12 of a catalog number. Glass shields are packed in individual boxes, 12 of a size to a shipping carton.

MARKSTONE KABNIT-LITE

Plastic Shielded—Fluorescent



Ideal under kitchen cabinets—furnishes glare-free, well concentrated light over sink, range, or other working surfaces. Modern, functional design harmonizes with kitchen and bathroom fixtures, appliances, etc. Hung individually, or in series, it provides wonderful, glare-free illumination.

Exclusive Markstone non-static plastic shield stays clean, won't collect dirt and dust. Easily removed to change bulbs.

Cat. No.	Lamp Used	Length Inches	Shpg. Wt. Lbs.	Price Each
	White Porcelite Enamel Finish			
KAB14	14-watt	15½	3¾	**$8.30**
KAB15	15-watt	18½	4	**8.30**
KAB20	20-watt	24½	4½	**9.45**

FLEXO Adjustable Fluorescent Lamps

Exclusive with "Flexo"—Six adjustments provide complete flexibility. Each has an automatic stop after making one complete revolution. Supporting arms have horizontal and vertical movement through a range of nearly a 6-foot circle. Double arms provide a variation of reach.

Starting Switch—Operates fluorescent tubes, turning light on or off by pressing switch momentarily. Practically instantaneous lighting.

Voltage and Current—105-125 volts, 60 cycle, A.C. 105-125 volts D.C. All D.C. models furnished with resistor cord. 220 volt on request.

Finishes: Bronze and Gray

UL APPROVED





GENERAL MODEL

For factory benches, office desks, industrial and business machines, laboratories, home workshops, watch-makers' benches. Two bolts clamp base to surface up to 3 inches thick. Bolts removable for screw surface mounting.

Cat. No.	Lamps	Power Factor	Current	Shpg. Wt. Lbs.	Price Each
4300	1-lite	50%	60 Cycle	7½	$15.75
4301	1-lite	100%	D.C.	7½	17.25
4302	1-lite	90%	60 Cycle	9	18.25
4303	2-lite	50%	60 Cycle	9	18.95
4304	2-lite	100%	D.C.	9	21.50
4305	2-lite	90%	60 Cycle	9½	21.50

DRAFTSMAN MODEL

Same as above except with bracket for screwing to underside of drawing board or table, leaving entire surface free for use with T-square or slide rule. Adaptable for wall mounting and machine application.

Cat. No.	Lamps	Power Factor	Current	Shpg. Wt. Lbs.	Price Each
4309	2-lite	50%	60 Cycle	10	$19.50
4310	2-lite	100%	D.C.	10	22.00
4311	2-lite	90%	60 Cycle	10½	22.00

DESK MODEL

Portable—attractive base with pen and pencil grooves for executive use, filing cabinets or for desks or tables which cannot be clamped or screwed. Double-arm extends 32 inches.

Cat. No.	Lamps	Power Factor	Current	Shpg. Wt. Lbs.	Price Each
4324	2-lite	50%	60 Cycle	23	$25.00
4325	2-lite	100%	D.C.	23	27.50
4326	2-lite	90%	60 Cycle	23½	27.50

FLOOR MODEL

Same as above except with pedestal base 13½ inches diameter. For general office and home use, physicians and dentists, assembly work in aviation and engine plants, for business machines. The 36-inch shaft permits lamp to be adjusted directly overhead on any task.

Cat. No.	Lamps	Power Factor	Current	Shpg. Wt. Lbs.	Price Each
4315	2-lite	50%	60 Cycle	30	$28.75
4316	2-lite	100%	D.C.	30	31.25
4317	2-lite	90%	60 Cycle	30½	31.25

Incandescent models available.

FLEXARM and LITEMASTER Fluorescent Desk Lamps



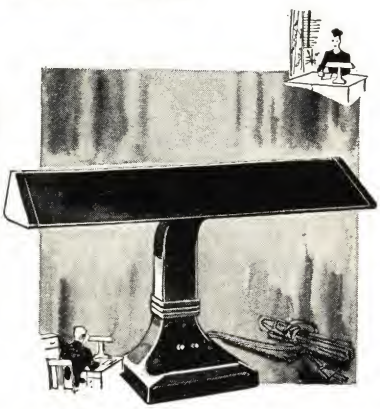
the ever dependable gooseneck feature insures easy placement of light

FLEXARM
1-Lite, No. 4448.....$ 9.50
2-Lite, No. 4444..... 14.95

LITEMASTER
1-Lite, No. 47.....$ 8.95

Both models finished in oven-fired statuary bronze or gray.

Uses standard T8 15-watt tubes.



Sturdy metal, non-magnetic base, 5¼ by 6½ inches. Rubber bumpers. Shade of heavy gauge steel, 2¼ by 3¼ by 18 inches. Reflectors are washable porcelain white enamel. U. L. approved 6-foot G. E. Flamenol cord and electrical materials. On and off automatic switch.

105-125 volts, 60 cycles, A.C. Packed one to a carton. Weight, 1-lite, 7 pounds; 2-lite, 9¼ pounds.

Prices do not include lamps.

Durable metal, non-magnetic base 5 by 5¾ inches. Shade of heavy gauge steel, 2¼ by 3¾ by 18 inches. Lamp height 11 inches. On and off automatic switch. Rubber bumpers. U. L. approved 6-foot Flamenol cord and electrical materials.

Reflectors are washable porcelain white enamel. 105-125 volts, 60 cycles, A.C.; D.C. available. Packed one to a carton. Weight, 7¼ pounds.

FLEXARM "CLOCKETTE" ADJUSTABLE FLUORESCENT LAMP—ONE-LIGHT



For the first time, the ever dependable gooseneck is combined with a genuine Telechron 3½-inch diameter electric clock to make an ideal desk lamp.

Flexible arm permits shade adjustment 10 to 13 inches in height and to any angle or position desired. Suitable in home, factory, laboratory, office or institution. Perfect for study, sewing and atop T-V set.

Sturdy durable alloy metal base 5¼ x 6¾ inches, has well for writing instruments. Rubber pads prevent marring surface. U.L. approved electrical materials. On and off automatic switch. Clock operates independent of lighting unit. Uses standard 15-watt T8 fluorescent tube. For AC only.

Beautiful oven-fired enamel finishes — highlighted royal statuary bronze, green, or warm gray for modern, with brass trim. Porcelain white enamel reflector, easily washable.

Packed one to a carton. Shipping weight 7½ lbs.

Price, No. **65** 1-Light Adjustable Fluorescent Lamp .....each **$16.50**

LITEMASTER EXECUTOR FLUORESCENT LAMP — 2 LIGHT



TELECHRON ELECTRIC CLOCK
FINEST LIGHTING ACCESSORY - OFFICE - HOME

Litemaster Executor No. 60 — Handsome desk lighting accessory for the finest office, home or institution.

Genuine Telechron 3½-inch diameter electric clock. Smart die-cast base 6¼ x 9¾ inches; steel shade 18 x 4½ x 2½ inches; height 14¾ inches.

Beautiful oven-fired durable finishes—Hi-lighted statuary bronze or warm gray for modern, with brass trim. Reflector, washable porcelain white enamel. U.L. approved construction and electrical materials. Automatic on and off switch. Rubber bumpers for surface protection.

For standard 15-watt T-8 fluorescent tubes. A.C. only. Packed one to a carton. Shipping weight 11 lbs.

Price, No. **60** Litemaster Executor.....each **$22.50**

DURA FLUORESCENT STARTERS

Approved by Underwriters' Laboratories, Inc.

Electrical Testing Laboratories

DURA CONVENTIONAL STARTERS



Cat. No.	Std. Pkg.	List Price
	15 and 20 Watt	
FS-2	500	$0.21
	30 and 40 Watt	
FS-4	500	.21
	4, 6 and 8 Watt	
FS-5	500	.42
	25 Watt	
FS-25	500	.23
	2 Pin, 100 Watt	
FS-6	250	.85
	4 Pin, 100 Watt	
FS-64	250	.88
	2 Pin, 85 and 100 Watt	
FS-85	250	.85
	4 Pin, 85 and 100 Watt	
FS-85-4	250	.85

DURA GUARDIAN MANUAL RE-SET STARTERS



Cat. No.	Std. Pkg.	List Price
	14, 15 and 20 Watt	
FS-20	500	$0.80
	30 Watt	
FS-30	500	.88
	40 Watt	
FS-40	500	.72
	4 Pin, 100 Watt	
FS-100	250	1.00
	2 Pin, 100 Watt	
FS-102	250	1.00
	4 Pin, 85 and 100 Watt	
FS-850	250	1.00
	2 Pin, 85 and 100 Watt	
FS-852	250	1.00

DURA DURAMATIC STARTERS



Fully Automatic Cut-out and Re-Set

Cat. No.	Std. Pkg.	List Price
	15 and 20 Watt	
FS-2NA	500	$0.72
	30 and 40 Watt	
FS-4NA	500	.72
	2 Pin, 100 Watt	
FS-6NA	250	1.00
	4 Pin, 100 Watt	
FS-6NA-4	250	1.00
	2 Pin, 85 and 100 Watt	
FS-85NA	250	1.00
	4 Pin, 85 and 100 Watt	
FS-85NA-4	250	1.00

DURA CIRCLINE STARTERS



Cat. No.	Std. Pkg.	List Price
	32 Watt	
FS-12	500	$0.25

JEFFERSON FLUORESCENT LAMP BALLASTS



No. 234-701


No. 234-501


No. 234-601

All of the materials used in Jefferson Electric Ballasts are of selected high quality. Moisture is removed in vacuum equipment of latest design and coils are double vacuum impregnated under pressure, making them impervious to moisture under all operating conditions. Only the best grades of electrical steels are used for laminae, which are re-annealed after punching.

The rugged steel cases are black enamel finished and equipped with convenient mounting brackets.

Installation—To promote efficient and long service the usual installation precautions must be observed. Like other electrical devices, ballasts have definite operating limitations. Jefferson Ballasts are designed to deliver rated watts to the lamp at the nominal voltage indicated on each unit. Failure to install on circuits within the limits indicated in the following table will cause lamp to deliver other than its rated output and may possibly damage the ballast or lamp.

Single Lamp Ballasts — 60 Cycles
Normal Power Factor

Cat. No.	Circuit Voltage	Lamp Watts	Appr. Watts Loss	Appr. Power Factor %	Appr. Shpg. Wt. One Std. Ctn.	Appr. Shpg. Wt. One Std. Ctn.	List Price
234-521	110-125	14	3.6	45	20	20	**$0.88**
234-501	110-125	15	3.5–4.5	55	20	20	**.88**
234-511	110-125	20	4.5	65	20	20	**.88**
234-541	110-125	30	7.0	60	10	25	**2.20**
234-543	220-250	30	6.75	50	10	22	**2.20**
234-546	199-216	30	6.25	55	10	22	**2.20**
234-581	110-125	40	8.75	65	10	22	**2.20**
234-583	220-250	40	10.0	55	10	22	**2.20**
234-586	199-216	40	9.0	60	10	22	**2.20**

Single Lamp Ballast — 60 Cycles
High Power Factor

234-621	110-125	14	3.6	85	10	15	**3.85**
234-601	110-125	15	3.5–4.5	90–100	10	15	**3.85**
234-611	110-125	20	4.5	90–100	10	15	**3.85**
234-641	110-125	30	7.0	90–100	10	35	**4.73**
234-643	220-250	30	6.75	90–100	10	25	**4.95**
234-646	199-216	30	6.25	90–100	10	25	**4.95**
234-681	110-125	40	8.75	90–100	10	35	**4.73**
234-683	220-250	40	10.0	90–100	10	25	**4.95**
234-686	199-216	40	9.0	90–100	10	25	**4.95**
†**234-691**	110-125	100	25.0	90–100	4	45	**11.00**
†**234-693**	220-250	100	25.0	90–100	4	45	**11.55**
†**234-696**	199-216	100	25.0	90–100	4	45	**11.55**

Two Lamp Instant Start Ballast — 60 Cycles
High Power Factor

234-181	110-125	2-40	25.0	95	4	44	**11.00**
***234-191**	110-125	2-40	25.0	95	4	44	**11.00**

†Will also operate the 85 Watt Lamp.
*For use in ambient temperatures as low as -40° F.

Nominal Voltage	Low Voltage	High Voltage
118	110	125
208	199	216
236	220	250

Frequency — Frequency must agree with the frequency indicated on the ballast housing.

Ventilation — It is important that the housing in which the ballast is mounted be suitably ventilated to insure proper dissipation of heat. These units, like most electrical devices, generate a certain amount of heat during normal operation should not be more than 50 degrees C.

Reduction of Stroboscopic Effect — Each two-lamp high power factor ballast is equipped with a condenser which not only corrects the power factor but operates one lamp out of phase with the other, thereby greatly reducing the stroboscopic effect characteristic of fluorescent lamps.

Two Lamp Ballasts — 60 Cycles
Normal Power Factor

Cat. No.	Circuit Voltage	Lamp Watts	Appr. Watts Loss	Appr. Power Factor %	Appr. Shpg. Wt. One Std. Ctn.	Appr. Shpg. Wt. One Std. Ctn.	List Price
234-985	110-125	2– 15	10.0	55	10	16	**$1.32**
234-986	110-125	2– 20	10.0	55	10	16	**1.32**

Two Lamp Ballasts — 60 Cycles
High Power Factor

234-701	110-125	2– 15	8.–9.	95–100	10	35	**5.25**
234-711	110-125	2– 20	10.0	95–100	10	35	**5.25**
234-841	110-125	2– 30	14.5	95–100	10	70	**6.05**
234-843	220-250	2– 30	12.5	95–100	10	70	**6.60**
234-846	199-216	2– 30	12.0	95–100	10	70	**6.60**
234-881	110-125	2– 40	17.5	95–100	10	70	**5.50**
234-883	220-250	2– 40	14.5	95–100	10	70	**6.05**
234-886	199-216	2– 40	13.5	95–100	10	70	**7.15**
†**234-791**	110-125	2–100	35.0	95–100	4	62	**14.30**
†**234-793**	220-250	2–100	35.0	95–100	4	62	**16.50**
†**234-796**	199-216	2–100	35.0	95–100	4	62	**16.50**

Two Lamp Ballasts — 60 Cycles
(Narrow Type 2½") — High Power Factor

234-441	110-125	2– 30	14.5	95–100	10	70	**8.25**
234-443	220-250	2– 30	12.5	95–100	10	65	**8.80**
234-446	199-216	2– 30	12.0	95–100	10	65	**8.80**
234-481	110-125	2– 40	17.5	95–100	10	70	**7.15**
234-483	220-250	2– 40	14.5	95–100	10	65	**7.70**
234-486	199-216	2– 40	13.5	95–100	10	65	**8.25**

Three Lamp 40 Watt Ballasts — 60 Cycles
High Power Factor

234-983	110-125	3– 40	23.0	90–100	4	44	**9.90**
234-980	220-250	3– 40	23.0	90–100	4	44	**11.00**

†Will also operate the 85 Watt Lamp.

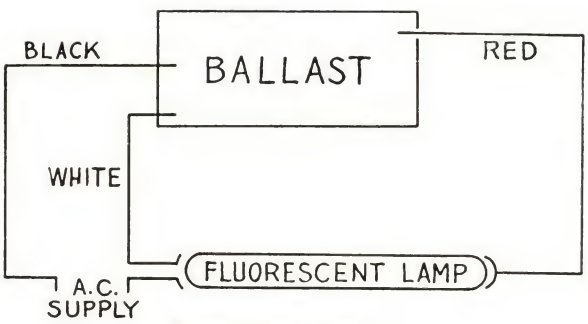
JEFFERSON SLIMLINE LAMP BALLASTS

FOR LONG SLIM FLUORESCENT LAMPS

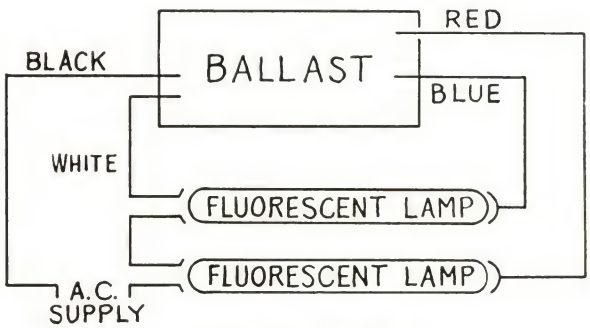
Approved by Underwriters' Laboratories, Inc.



Slimline lamps with single pin contact at each end operate on the hot cathode principle. They are instant starting and do not require a separate starting device. The types listed below are designed for operation on a nominal line voltage of 118 or a range of 110-125 volts. The function of the ballast is to transform the line voltage to the high starting voltage required by the lamp and when the arc is established, limit the current and voltage to that required by the lamp in normal operation. For efficiency and long life lamp service it is imperative that the ballast characteristics closely match those of the lamps and users guarantee is the E.T.L. label appearing on each ballast. This certifies that the Electrical Testing Laboratories, an independent testing organization, periodically test ballasts taken from regular production to ascertain if they meet the electrical requirements set up by the leading lamp manufacturers.



Wiring Diagram Fig. 1
For Single-Lamp Ballasts



Wiring Diagram Fig. 2
For Two-Lamp Ballasts

110-125 Volts **60 Cycles**

TWO LAMP BALLASTS
(Equipped with Leads)

Cat. No.	Lamp Size	Lamp Watts	Lamp Current M.A.	Approx. Watts Loss	Approx. Wt. Lbs.	List Price
254-171	42T6	(2)–18	120	15	7½	**$11.00**
254-181	64T6 72T8	(2)–27.5 (2)–26	120 120	20	8½	**11.00**
254-301	96T8	(2)–34	120	25	9½	**12.10**
254-271	42T6	(2)–25	200	18	8¾	**11.55**
254-281	64T6 72T8	(2)–39 (2)–38	200 200	24	11	**12.10**
254-401	96T8	(2)–51	200	32	14	**12.10**
254-321	42T6	(2)–33	300	23	10	**14.85**
254-331	64T6 72T8	(2)–51 (2)–51	300 300	35	13	**15.40**
254-311	96T8	(2)–69	300	40	17	**15.95**
254-481	72T12	(2)–58	425	37	16	**15.40**
254-491	96T12	(2)–75	425	45	19¼	**17.60**

110-125 Volts **60 Cycles**

SINGLE LAMP BALLASTS
(Equipped with Leads)

Cat. No.	Lamp Size	Lamp Watts	Lamp Current M.A.	Approx. Watts Loss	Approx. Wt. Lbs.	List Price
254-131	42T6	18	120	9	6	**$9.35**
254-141	64T6 72T8	27.5 26	120 120	11	6	**9.35**
254-161	96T8	34	120	14	6½	**10.20**
254-231	42T6	25	200	13	7¼	**9.90**
254-241	64T6 72T8	39 38	200 200	15	7½	**10.45**
254-261	96T8	51	200	18	8½	**11.00**
254-341	42T6	33	300	15	7½	**12.10**
254-351	64T6 72T8	51 51	300 300	19	9	**13.20**
254-361	96T8	69	300	21	9½	**13.20**
254-461	72T12	58	425	21	10	**13.20**
254-471	96T12	75	425	25	15	**13.20**

SERIES-SEQUENCE STARTING BALLASTS

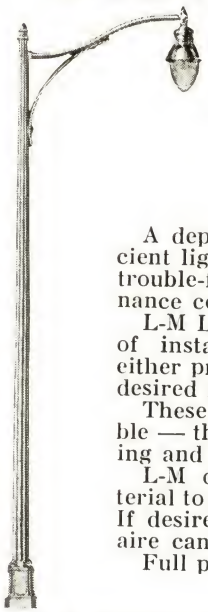
Two Lamp (Equipped with Leads)

Cat. No.	Lamp Size	Lamp Watts	Lamp Current M. A.	Approx. Watts Loss	Approx. Weight	List Price
254-501	96T12	(2)–75	425	30	13	$13.75

All the above Ballasts can be furnished with Terminal Panels upon request.

L-M STREET LIGHTING

L-M STREET LIGHTING STANDARDS



The L-M line of street lighting equipment includes every item required for a complete modern installation — luminaires, standards, brackets, mast-arms, switches, transformers, cut-outs, etc.

A dependable, complete line of efficient lighting, lasting good appearance, trouble-free service and low maintenance cost.

L-M Lighting Standards for all types of installations can be supplied in either pressed steel or concrete for any desired mounting height.

These standards are strong and durable — their ornamental design is pleasing and correct to the last detail.

L-M offers a complete line of material to meet every street lighting need. If desired, a specially designed luminaire can be supplied.

Full particulars furnished on request.

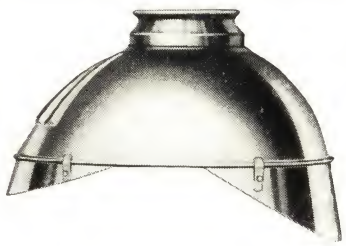
L-M DIRECTOLITE GLASS REFLECTOR



Light distribution similar to that of modern enclosed luminaires at a cost comparable to the old style radial reflectors in which a mirrored reflecting surface is permanently bonded to the glass of shock-proof qualities. Even illumination is obtained with very few shadows under usual installation conditions.

Cat. No.	Description Reflectors	For Light Center Lamps, In.
614308A1	Small Symmetric	5⅜
614308A2	Large Symmetric	7

STAINLESS STEEL DIRECTOLITE REFLECTOR

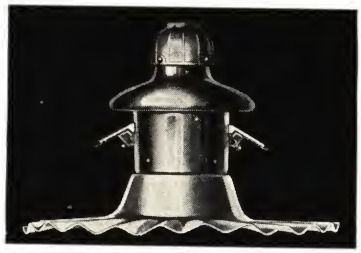


A sturdy, rigid reflector whose physical properties of strength and permanence assure many years of trouble free, low cost operation. Equally important are the excellent lighting characteristics which give high utilization of light on the street surface. With lighting characteristics in I.E.S. Type II classification, this luminaire finds its natural application for residential streets. It is available with a complete line of collars for attachment to porcelain and metal heads in which correct focal position is obtained with normal settings for 1,000 and 2,500 lumen 5⅜-inch light center series street lamps or 5¼-inch light center multiple lamps.

Cat. No.	Description
614338B1	Reflector with street and house side shields.
614337B1	Plain reflector without street or house side shields.
614340A5	Street side shield.
614340A3	House side shield.

L-M STREET LIGHTING

L-M METROLITE LUMINAIRE



The Metrolite Luminaire is recommended for use on straight series circuits of 11,000 volts or less and on multiple street lighting circuits. Furnished with a wet process, green glazed porcelain head fitted with metal dead end terminals for outer wiring. This luminaire is available in a variety of glassware and reflector combinations, and with a wide selection of cast iron hoods for mounting, and with either series or mogul multiple socket.

Listed and illustrated here is the L-M Metrolite porcelain head with 20-inch radial bowl and radial wave reflectors and series socket.

Cat. No.

***600011C1** Radial Bowl Reflector with Type C Collar for Clip Attachment.

†600011C2 Radial Wave Reflector with Type C Collar for Clip Attachment.

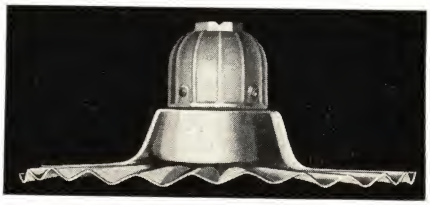
***600011C9** Radial Bowl Reflector with Type G Collar for Clip or Adapter Attachment.

†600011C10 Radial Wave Reflector with Type G Collar for Clip or Adapter Attachment.

*5⅜ and 7-inch light center lamps.

†5⅜-inch light center lamps.

L-M METAL CONVERTOLITE LUMINAIRE



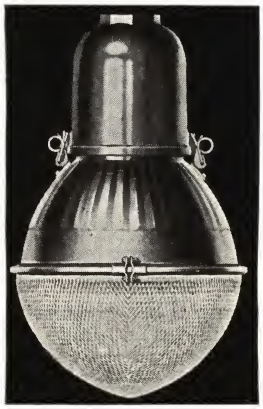
This fixture consists of a metal hood and metal cast reflector, or radial reflector. The cast reflector is furnished in two sizes, a short type for multiple service, and a long type for series service. Four different types of hoods are available, adaptable to various types of mounting. Hoods are furnished for 1¼-inch pipe tap, unless otherwise specified. All 8-inch Holophane refractors may be used with this fixture. The advantageous feature of this unit is that it can easily be converted into a porcelain head type unit, for use on high voltage series circuit, by merely attaching a porcelain head type unit between the hood and cast or radial reflector.

Cat. No. Mogul Multiple	Cat. No. Series	Description
602016C1	.....	With 20-inch Bowl Reflector
602016C2	.....	With 20-inch Wave Reflector

L-M STREET LIGHTING

L-M SPHEROLITE LUMINAIRE

The Spherolite Luminaire with Fluted Alzak Aluminum reflector increases lamp efficiency — gives more light without increasing lamp size. Light is directed to the street and the concealed-light-source eliminates glare. Light weight — weatherproof, dust-tight construction — detachable glassware for easy replacement in the field, all these quality features lower the maintenance cost.



Designed for use with lamps up to and including 575 watts or 10,000 lumens. Available with a choice of controlled light patterns, a choice of glassware holders and wide selection of internally and externally wired hoods for series or multiple circuits, and a selection of porcelain heads.

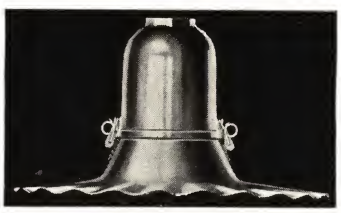
Illustrated here is the Spherolite Luminaire with inner wired metal head and V-band glassware holder. Furnished with series receptacle and recommended for use on 5000-volt series circuits or less. Furnished with multiple socket where desired to standardize on one size hood for a complete system.

For Series Operation

Cat. No.	Description
603800 C4	With Globe only, Symmetric light distribution. IES Type V. V-Band Glassware Holder.
603800 C5	With B-way Refractor and Deflector, Asymmetric. IES Type III. V-Band Glassware Holder.
603800 C6	With Globe and Deflector, Asymmetric. IES Type IV. V-Band Glassware Holder.

For Mogul Multiple Operation

603800 C10	With Globe only, Symmetric light distribution. IES Type V. V-Band Glassware Holder.
603800 C11	With B-way Refractor and Deflector, Asymmetric. IES Type III. V-Band Glassware Holder.
603800 C12	With Globe and Deflector, Asymmetric. IES Type IV. V-Band Glassware Holder.



Open type reflector attached to the inner wired high-voltage Spherolite metal head. Furnished with wet process porcelain series receptacle and recommended for 5000-volt series circuits or less. Produces IES Type V symmetric light distribution.

Cat. No.	Description
602008 C4	With Alzak Aluminum Reflector

L-M STREET LIGHTING

L-M SPHEROLITE LUMINAIRE



Spherolite Luminaire with Metrolite porcelain head and pressure latch glassware holder.

Furnished with series receptacle and recommended for use on straight series circuits of 11,000 volts or less.

Cat. No.	Description
600000 C1	With Globe only, Symmetric, IES Type V distribution.
600000 C2	With B-way Refractor and Deflector, Asymmetric, IES Type III distribution.
600000 C3	With Globe and Deflector, Asymmetric, IES Type IV distribution.

L-M CONTROLITE SR. LUMINAIRE



The Controlite Sr. Luminaire is an ornamental unit with concealed light source, especially recommended for use on straight series circuits of 5000 volts or less with 4000 to 15000 lumen lamps, and on multiple street lighting circuits with 300 to 750-watt lamps. It is ideal for the efficient and aesthetic lighting of the boulevards and business districts of larger cities.

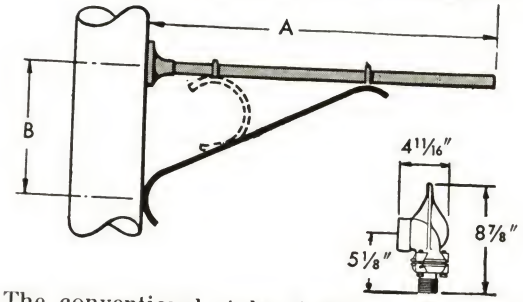
This luminaire controls the light scientifically with an Alzak Aluminum dome reflector for symmetric light distribution and with an additional Alzak Aluminum deflector for asymmetric IES Type IV light distribution. In addition to the rigid suspension type illustrated and listed, luminaires are available with ornamental suspension type or adjustable heads.

300-750 Watt Lamps

Cat. No.	Type	Distribution
602020C103	Mogul Mult.	Asymmetric IES Type IV
602020C3	Mogul Mult.	Symmetric IES Type V
	4000-15000 Lumen Lamps	
602020C101	H.V.W.P.	Asymmetric IES Type IV
602020C1	H.V.W.P.	Symmetric IES Type V

L-M STREET LIGHTING

STRAIGHT 1¼-INCH PIPE BRACKETS



The conventional style of wood pole mounted bracket is available with a selection of flat and curved cast pole plates, or with a welded steel curved plate. Scrolls, constructed of flat or channel steel, are available in single and double types.

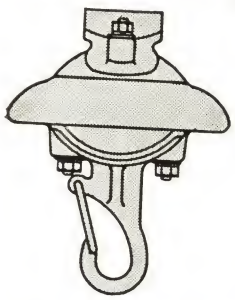
With Single Flat Steel Scroll and Pressed Steel Pole Plate

Cat. No.	Description	"A"	"B"
637034C3	With Plumbizer	4'-0"	1'-6½"

With Double Flat Steel Scroll and Malleable Iron Pole Plate

637035C67	With Plain Unthreaded End	4'-0"	1'-6½"

L-M INSULATED SAFETY HOOK FOR STREET LIGHTING

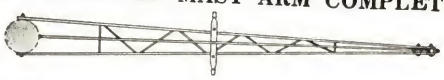


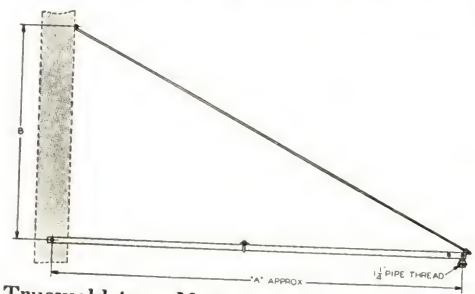
Where protection is of vital importance this hanger is recommended. The high voltage insulator is a solid piece of porcelain. The iron top cap is flat and tapped to fit a ¾-inch or 1¼-inch pipe.

All metal parts are galvanized.

243 For ¾-inch Pipe
286 For 1¼-inch Pipe

L-M TRUSWELD MAST ARM COMPLETE



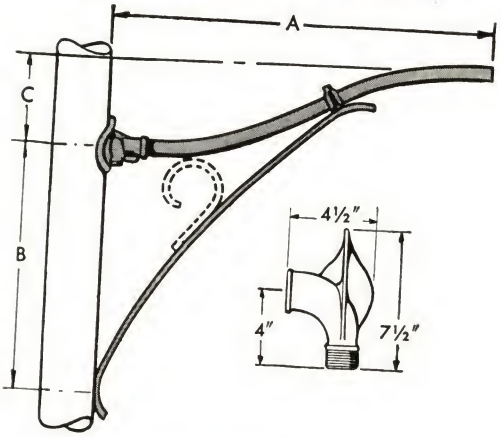


A Trusweld type Mast Arm furnished with rigid end fitting equipped with 1¼-inch pipe threads for accommodating luminaire. If specified, other sizes of pipe threads will be furnished. Length "A" to be specified when ordering. Galvanized.

Cat. No.	Dimensions A Feet	A Inches	B Feet	B Inches
636609C19	6	0	2	6
636609C20	8	0	3	0
636609C21	10	0	3	6
636609C22	12	0	4	0
636609C23	14	0	4	6
636609C24	16	0	5	0

L-M STREET LIGHTING

L-M UPSWEEP PIPE BRACKET



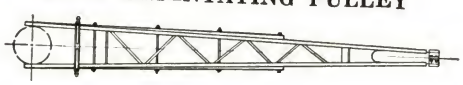
An upsweep pipe bracket of 1¼ or 2-inch pipe furnished with a malleable iron pole plate for wood pole mounting. End fittings are furnished with pipe thread unless specified with straight end for slip fitter heads. Galvanized.

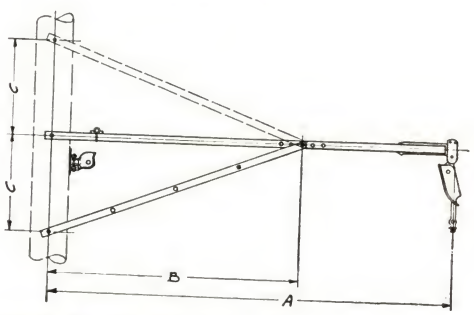
With Ornamental Ell and Double Channel Scroll

1¼-Inch Pipe Brackets

Cat. No.	Dimensions A	B	C
637000Z49	4'-0"	2'-2½"	1'-3"
637000Z65	6'-0"	3'-1¼"	1'-7"
637000Z81	8'-0"	3'-8 "	2'-0"
	2-Inch Pipe Brackets		
637002Z8	4'-0"	2'-2½"	1'-3"
637002Z24	6'-0"	3'-1¼"	1'-7"
637002Z40	8'-0"	3'-8 "	2'-0"

L-M TRUSWELD MAST ARM WITH ORIENTATING PULLEY





A very sturdy Trusweld Mast Arm due to the heavy side braces which are bolted to the outside of the channel and extend to both sides of the pole. If desired, these channel braces may be used above the arm. Galvanized. May be furnished with spreader.

Cat. No.	Arm Without Spreader	Dimensions A	B	C
636615C1	6'	6'	3'- 9"	1'-10"
636615C2	8'	8'	5'- 7"	1'-10"
636615C3	10'	10'	7'- 3"	2'- 8"
636615C4	12'	12'	8'-11"	3'- 6"
636615C5	14'	14'	10'- 7½"	4'- 4"
636615C6	16'	16'	12'- 6"	5'- 0"

STEBER LIGHTING EQUIPMENT

1600 SERIES ENCLOSED FLOODLIGHTS



Medium Beam units are highly efficient general purpose floodlights which combine both "punch" and good light distribution.

Narrow Beam units are applicable where more concentrated intensity is required at greater distances.

Reflectors, spun aluminum, polished interior surface combined with proper type lens to provide medium, broad, or narrow beam light pattern.

Triple Purpose Mounting Bracket is ruggedly made of cast aluminum, adjustable at all angles, locks securely in position: for wall, cross-arm, or pipe up to 2½-inch.

300–500 Watts — No. 1600 Series

Cat. No.	Diam. Inches	Beam	Lens	Shpg. Wt. Lbs.	Price Each
1600	12	Medium	Clear	10	**$17.00**
1602	12	Narrow	Clear	10	**19.50**

3000 SERIES OPEN TYPE OUTDOOR FLOODLIGHTS



Spun aluminum reflectors in Lumicote Ultranamel finish. This series features the new service type head with insulating bushings. By removing the bushing, ½-inch BX, Romex or similar type connectors can be used. Entire socket service head is quickly detached for easy wiring by removing three cap nuts.

Triple Purpose Mounting Bracket

Substantial adjustable strap iron bracket, for mounting on wall, cross-arm, or pipe sizes up to 2½ inches. Weatherproofed finish. Easy to attach — easy to adjust to any angle. Carton quantity, 3.

Cat. No.	Watts	Reflector Dia. In.	Shpg. Wt. Lbs.	Price Each
3000A-3	300– 500	15	25	**$11.00**
3050A-3	750–1000	17½	30	**15.00**

STEBER LIGHTING EQUIPMENT

SERIES 4000—"SPORTSLITER"

Open or Enclosed Type
750-1000-1500 Watts



Designed for efficient and economical floodlighting of baseball, softball and football fields — for race tracks, tennis courts, golf driving ranges, beaches and all sports areas requiring high intensity illumination. Ideal for protective lighting of industrial plants, railroad yards, or for lighting night construction projects. Its modern design incorporates features which make for ease and simplicity of installation and maintenance, plus maximum light output and proper distribution.

Available in open or enclosed type, Diffuse Alzak (medium beam) or Specular Alzak (narrow beam) with sturdy, simple mounting brackets for cross arm, clamp, wall or pole installation. Open type may be converted to enclosed type, even after installation, since all units are equipped with sturdy hinged lens ring mounting bracket and heat-resisting lens assembly.

Lamp socket is mounted in a separate cast aluminum cap which is gasketed and attached to the reflector neck. This removable cap serves as a wiring compartment, facilitating installation and is provided with ½-inch threaded opening. Removable insulating bushing in this opening protects service leads. Completely weatherproof with degree marking plates for accurate setting. Listed by Underwriters' Laboratories.

Floodlights with Crossarm Brackets

Cat. No.	Description	Price Each
4001	Open type medium beam 88°	**$26.50**
4011	Open type narrow beam 36°	**36.00**
4006	Enclosed type medium beam 88°	**45.50**
4016	Enclosed type narrow beam 36°	**55.00**

Floodlight with Yoke Only

(Specify Mounting Bracket)

4000	Open type medium beam 88°	**24.00**
4010	Open type narrow beam 36°	**33.50**
4005	Enclosed type medium beam 88°	**43.00**
4015	Enclosed type narrow beam 36°	**52.50**

Accessories and Mounting Brackets

4020	Lens and lens ring assembly	**19.00**
4021	Cross arm mounting bracket	**2.50**
4022	Clamp type mounting bracket	**5.00**
4023	Wall flange mounting bracket	**4.50**
4024	Pole mounting bracket	**5.00**

STEBER SMALL FLOODLIGHTS

Listed by Underwriters' Laboratories, Inc.

Ruggedly constructed. Fully adjustable double strap bracket and 4¼-inch round base with screw holes for mounting on flat surface or 4-inch outlet box. Complete with 6-ft. approved cord set. Available in heavy gauge steel.



Open Type

OPEN TYPE

No. 57 and No. 59 floodlights are finished outside in Graytone Ultranamel, Lumicote inside.

Cat. No.	Watts	Diam. Inches	Finish	Std. Pkg.	Pkg. Wt.Lbs.	Price Each
57	100	7½	Ultranamel	6	15	**$3.85**
59	200–300	10½	Ultranamel	6	18	**4.40**

ENCLOSED TYPE

Completely weatherproof. Equipped with clear lens, and endless type double channel Neoprene gasket which is resistant to moisture, heat or cold, providing a permanent weatherproof seal between lens and reflector.



Enclosed Type

Cat. No.	Watts	Diam. Inches	Finish	Std. Pkg.	Pkg. Wt.Lbs.	Price Each
572	100	7½	Ultranamel	6	24	**$6.35**
592	200	10½	Ultranamel	6	33	**7.25**

ALUMINUM UNITS—ENCLOSED TYPE

This floodlight is made of spun aluminum, with highly polished reflecting surface, clear convex lens and endless type double channel Neoprene gasket which is resistant to moisture, heat or cold, providing a permanent weatherproof seal between lens and reflector.



No. 800

No. 800 has easy detachable service head with insulating bushing, for protecting service leads. Heavy mounting bracket for universal adjustment. Can be mounted on any flat surface or directly to ¾- or 4-inch outlet box. Cord set not furnished.

Cat. No.	Watts	Diam. Inches	Std. Pkg.	Pkg. Wt. Lbs.	Price Each
800	200–300	10⅜	2	10	**$8.50**

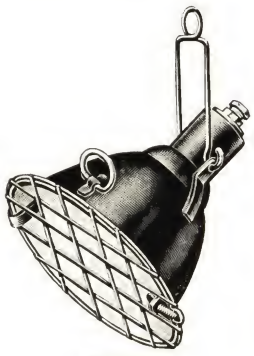
STEBER CARGOLITES

Heavy duty portable lights for lighting ships' holds, stowing cargo, use on docks and piers, excavation work, construction projects, loading planes and freight cars, ship and plane repairs and construction, storage yards and many other applications.

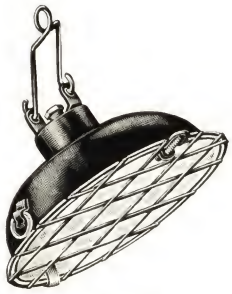
Reflectors are made of heavy gauge steel. The rugged guards are hinged and have a simple but positive locking device; heavy cross woven wires are electrically welded. The guard ring encircles the beaded rim of the reflector and acts as a bumper to protect both reflector and lamps from damage in rough service. Heavy wire hanger has a 2-inch loop for suspending Cargolite by a rope. Two additional hanger loops are welded to opposite sides of reflector bowl, permitting unit to be tilted or tied in any position.

Multiple cluster types, with one-piece reflector, provide continuous operation in the event of individual lamp failure. Steber clusters are easily removable for wiring. An added feature of the Steber cluster is its relatively lower internal temperature —at the most critical point—where service leads are attached. An approved weatherproof gland and gasketed cluster make these units weatherproof.

Reflectors are finished in Steber Ultranamel: Black outside, and glossy white inside. Guards and hangers are plated.



No. 5015



No. 5016

Single Lamp — Mogul Socket

Cat. No.	Lamp: Outlets	Lamp: Watts	Refl. Diam.	Std. Pkg.: Qty.	Std. Pkg.: Wt.	Price Each
5015-1	1	300–500	15½	2	18	**$16.50**
5017-1	1	750–1000	17½	2	30	**19.75**
5418-1	1	300–500	18	3	28	**13.20**

16-Inch Four-Light Cluster

5016-4	4	60–100	16	2	19	**16.00**
5016-5	5	60–100	16	2	20	**16.50**

18-Inch Four and Five-Light Clusters

(Approved by U. S. Coast Guard for Merchant Vessels)

5018-4	4	60–150	18	2	28	**20.00**
5018-5	5	60–150	18	2	28	**21.00**



No. 5018

CORD SETS

Cord sets not included, but can be furnished as required. Prices quoted on request.

STEBERLITE BASIC UNITS AND ACCESSORIES



LAMP NOT INCLUDED

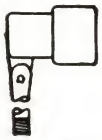
Listed below is a short line of versatile fittings in which the three basic units alone can handle nearly all problems of general or supplementary floodlighting. The smartly designed accessories add many more variations for complete floodlighting needs.

The Steberlite features: Long life; Enclosed wiring; Weatherproof construction; Compact size; Quick and easy hook-up; Minimum heat generation.

Shown at left is cluster of five Steberlites mounted to S-301 Adapter Box and S-302 Pole Slip Fitter.



Steberlite Basic Unit No. S300



S-300



S-350



S-301



S-302

S-300 Lamp Holder — cast aluminum Steberlite, factory wired. Mounting arm threaded ½-inch with locknut. Silicone gasket for complete weather protection with either PAR-38 or R-40 lamps — carton, 1; standard package, 12; package weight, 11 lbs. .....each **$3.00**

S-350 Mogul Base Lampholder — cast aluminum Steberlite, factory wired. Mounting arm threaded ½-inch with locknut. Silicone gasket gives complete weather protection with R-40 mogul base — carton, 1; standard package, 6; package weight, 9 lbs. .....each **$6.80**

S-301 Cluster Adapter Box—cast aluminum, complete with weatherproof gasket and cover. Generous wiring compartment with six openings tapped ½-inch for mounting up to five Steberlites—carton, 6; standard package, 6; package weight, 6 lbs. .....each **$3.00**

S-302 Pole Slip Fitter—for either 1½- or 2-inch pipe. Furnished with ½-inch close nipple for attachment to cluster fittings—carton, 6; standard package, 6; package weight, 6 lbs. .....each **$1.90**



S-314, S-315



S-316

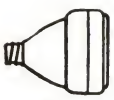
S-314 4-inch Round Cluster Fitting — cast aluminum, complete with weatherproof gasket and cover. Generous wiring compartment with six openings, tapped ½-inch for mounting up to five Steberlites—carton, 6; standard package, 6; package weight, 4½ lbs. .....each **$2.60**

S-315 3¼-inch Round Cluster Fitting—similar to S-314 except four tapped openings and one plug closure, for two or three Steberlites—carton, 6; standard package, 6; package weight, 3 lbs. .....each **$2.00**

S-316 4-inch Round Cluster Fitting—same as S-314 except furnished with cover, having ½-inch tapped opening to provide for mounting up to six Steberlites — carton, 6; standard package, 6; package weight, 4½ lbs. .....each **$3.00**



S-303



S-304



S-305



S-307

S-303 4-inch Outlet Box Cover—with center opening tapped ½-inch for mounting Steberlites—carton, 12; standard package, 12; package weight, 3 lbs. .....each **$0.55**

S-304 Combination Glare Shield and Lensholder—spun aluminum housing for completely shielding lamps in S-300 Steberlites. Easily detachable ring holds color lens (U-45) and/or baffle louver — carton, 6; standard package, 6; package weight, 4 lbs. .....each **$2.50**

S-305 Baffle Louver — drawn steel, black untranamel finish. Fits S-304 Glare Shield—carton, 6; standard package, 6; package weight, 3½ lbs. .....each **$1.00**

S-306 Glare Shield, Visor Type — aluminum, fits S-350 mogul base Steberlite—carton, 6; standard package, 6; package weight, 4 lbs. .....each **$2.65**

S-307 Wire Guard — rust resisting, electrically welded. Clamps on S-300 Steberlite to protect PAR-38 or R-40 lamps—carton, 6; standard package, 6; package weight, 4 lbs. .....each **$1.00**

S-308 Wire Guard—same as S-307, except to clamp on S-350 Steberlite to protect R-40 lamps—carton, 6; standard package, 6; package weight, 4 lbs. .....each **$1.25**



C-58



C-5



C-8



U-45

C-58 Pole or Wall Mounting Flange—for open wiring. ½-inch threaded opening. Insulating bushings to protect entrance leads—carton, 12; standard package, 12; package weight, 10 lbs. .....each **$0.45**

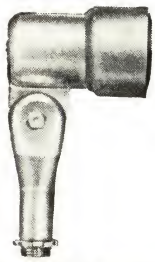
C-5 Pole or Wall Mounting Flange—for enclosed wiring. Two ½-inch tapped openings. Gasketed cover and set screw for fixture alignment—carton, 12; standard package, 12; package weight, 5 lbs. .....each **$1.30**

C-8 ½-inch Slip Flange—to anchor conduit where connection to outlet box on inside wall is desired — carton, 12; standard package, 12; package weight, 2 lbs. .....each **$0.50**

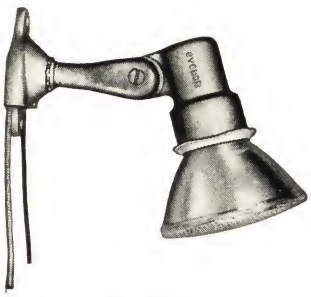
U-45 Colored Lenses—heat-resisting. Available in four colors. Use suffix A, B, G or R to denote amber, blue, green, or red. Fits S-304 Lampholder —carton, 6; standard package, 36; package weight, 15 lbs. .....each **$0.90**

STEBERLITES—FARM LIGHTING EQUIPMENT

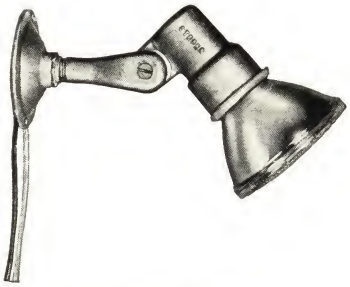
LAMPHOLDERS FOR SPOT AND FLOOD LIGHTING FARM AND HOME



No. S-300 Lampholder



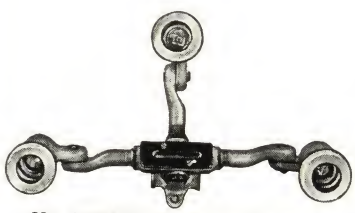
No. S-312
Lampholder and Wall or Pole Mounting Flange



No. S-313
Lampholder and Mounting Plate for 4-inch Outlet Box



No. S-320 Two Lamp Cluster



No. S-330 Three Lamp Cluster

Specifications

Steberlite line of cast aluminum lampholders for "Sealed Beam" reflector and projector type lamps for floodlighting yards, feed lots, corrals, driveways, croquet and tennis courts, patios or other play areas on farms, country estates and homes. In fact, Steberlites are the economical answer to outdoor lighting of every description. They are completely weatherproof, of durable cast aluminum with articulated joint permitting quick and easy angle adjustment to any desired range. Each Lampholder is equipped with a special silicone rubber gasket which guarantees a permanent seal between lamp and socket. In this listing we offer the S-300 Lampholder to be mounted singly, in pairs or in clusters of three lamps depending upon the area to be illuminated and the intensity of light desired. Each Lampholder is carefully wired at the factory, facilitating assembly and reducing installation costs.

No. S-330 is a three lamp cluster unit complete with Lampholders, adapter fitting and mounting bracket.

No. S-320 is a two lamp cluster to which an additional Lampholder may be added at any time to boost the volume of light output and coverage.

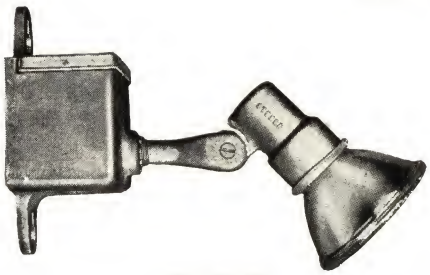
The versatility of Steberlites permits many combinations and arrangements which will answer any lighting problem. Other Steberlite fittings and accessories are available, including Color equipment, louvers, adapters for four or five lamps, pole mountings, flanges, etc.

Cat. No.	Description	Cart. Qty.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
S-300	Lampholder, cast aluminum, completely wired. Mounting nipple threaded ½ in. with lock nut. Special Silicone gasket gives complete weather protection with either PAR-38 or R-40 lamps.	1	12	11	**$3.00**
S-312	S-300 Lampholder, completely wired, and wall or pole type cast mounting flange.	1	12	18	**3.50**
S-313	S-300 Lampholder, completely wired, and outlet box plate for mounting on 4-in. Outlet Box.	1	12	12½	**3.50**
S-320	Two lamp cluster consisting of 2 S-300 Lampholders completely wired, Adapter Fittings, close nipple and cast mounting flange.	1	6	13	**8.00**
S-330	Three lamp cluster consisting of three S-300 Lampholders completely wired, Adapter Fitting, close nipple, and cast mounting flange.	1	6	18	**11.00**

Lamps not included.

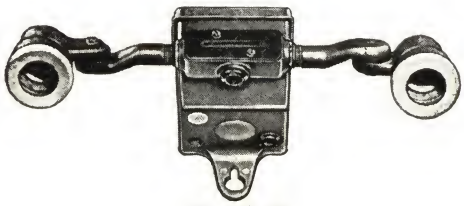
STEBER FARM LIGHTING EQUIPMENT

Low Voltage Remote Control System



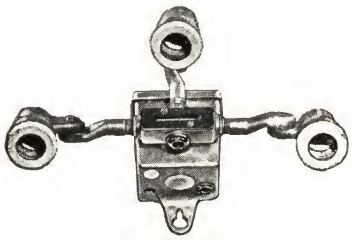
No. RC-401

Single Light—Cast Aluminum Lampholder with General Electric Remote Control.



No. RC-402

Two Light—Cast Aluminum Lampholder with General Electric Remote Control.



No. RC-403

Three Light—Cast Aluminum Lampholder with General Electric Remote Control.

Remote operation of lighting units from many points of control heretofore has involved complicated equipment and a maze of wiring at high installation cost. The Steber systems, employing General Electric Remote Control Unit, features:

1. Savings up to 80 per cent in labor and materials.
2. Absolute safety in hazardous or wet locations.
3. Complete indicating control of the circuits as switches are pressed to "on" or "off" positions.
4. Uses only low cost wire on long runs to switch locations.
5. Control switches from any number of locations.
6. Practically unlimited length of switch loads.
7. Simplicity of installation.

How It Operates

In aluminum casting containing the remote control mechanism, there is a transformer and a relay or solenoid operated switch. The transformer reduces the circuit voltage (115-125 volt AC) to 24 volts which is the voltage of the circuits which run to the various remote control switches. Thus, due to the long runs of cable to barns and other farm buildings, which is often prohibitive when standard 115-125 volt wiring has to be used, this method of remote control immediately reflects an economy which brings the safety, convenience and time saving of remote control within the means of many thousands of farm owners.

The relay operated switch opens or closes the circuit to the light as the remote switches are moved to "on" or "off" position. More than one light can be operated through a single relay provided the total load does not exceed ⅓ h.p., 15 amp., 125 volts AC.

The remote control system, using low voltage, is not subject to the same code restrictions as the conventional system. Because of its inherent safety, installation is simplified. The low voltage system can be short circuited at any point without danger to the installation of excessive heat or fire, or injury to the operator. Low cost 3-conductor wire may be used for underground, overhead or inside wiring as designated.

Complete Lighting Units

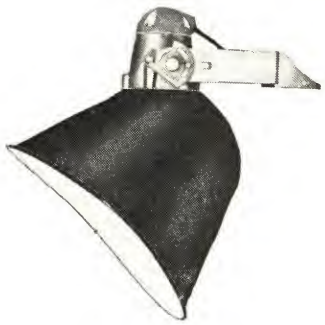
Nos. RC-401, RC-402 and RC-403 are complete lighting units. Aluminum Lampholders for PAR-38 Lamps are attached to the Remote Control Box, which also is cast aluminum, and are factory wired. Connections to 115-125 volt line and to Remote Control switches are properly labeled permitting quick and easy installation.

Cat. No.	Description	Carton Qty.	Std. Pkg.	Pkg. Wt.	Price
RC-400	General Electric Remote Control Unit	1	1	3	**$14.85**
RC-401	Single Light—Cast Aluminum Lampholder with General Electric Remote Control	1	1	4	**18.85**
RC-402	Two Light—Cast Aluminum Lampholder with General Electric Remote Control	1	1	5½	**23.35**
RC-403	Three Light—Cast Aluminum Lampholder with General Electric Remote Control	1	1	7	**26.35**

Note: Use General Electric Remote Control Switch No. G-3564 and Flamenol 3-conductor low voltage wire.

STEBER LIGHTING EQUIPMENT

"SPACE-LITER" ELLIPTICAL FLOODLIGHT



This elliptical open type Floodlight has a vitreous fired porcelain enamel outer coat which is expertly fused to a streamlined, eye-appealing elliptical contour of heavy gauge steel. Versatile mounting facilities and roomy, convenient wiring compartments, simplifies and reduces installation costs.

Cast aluminum neck is attached to reflector by a backup flange and six machine screws. This neck also contains the wiring compartment, entrance to which is made through a weatherproof gasketed cap. Lamp socket is securely mounted in the cap which is also provided with a ½-inch threaded opening equipped with insulating bushing to protect service leads.

Each unit is equipped with indicator scale with 5° graduations to set for accurate aiming, plus a built-in re-positioning stop to insure return to original setting after servicing. Brackets and fittings are heavily plated. Sturdy yoke bracket, securely attached to reflector neck assures universal adjustment to any desired angle.

"Space-Liters" are furnished with or without inner reflector of Alzak aluminum, either diffuse or specular, to increase light intensity at the center of the beam for "Punch" lighting.

Mounting	Cat. No.	Price Each	Mounting	Cat. No.	Price Each
For PS-35, PS-40, 300 and 500 Watt or T-16 400 Watt Mercury Vapor Lamps*					
Wall	**2500**	**$22.90**	Pipe Clamp	**2502**	**$24.35**
Crossarm	**2501**	**22.90**	Pole Fitter	**2503**	**25.75**
For PS-52, 750-1000 and 1500 Watt Lamps					
Wall	**2510**	**24.35**	Pipe Clamp	**2512**	**25.75**
Crossarm	**2511**	**24.35**	Pole Fitter	**2513**	**27.20**
For T-24, 750 and 1000 Watt Bi-Post Lamps					
Wall	**2520**	**27.20**	Pipe Clamp	**2522**	**28.60**
Crossarm	**2521**	**27.20**	Pole Fitter	**2523**	**30.05**

*Note Mercury Vapor Lamps should be burned up within 10° of vertical.

REVERE COMBINATION AREA AND TOP FLOODLIGHTS

Underwriters' Approved

Combinations consisting of Area Light and Revere No. 3160 Aluminum or No. 3180 Porcelain enclosed type top floods.

Unit shown is No. 3550-S.



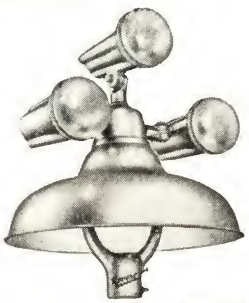
Description	Porcelain Series Cat. No.	Wt.Lbs. Each	Price Each	Aluminum Series Cat. No.	Wt.Lbs. Each	Price Each
1 Top Light	**3450S**	27	**$33.83**	**3450R**	21	**$33.83**
2 Top Lights	**3550S**	34	**47.38**	**3550R**	27	**47.38**
3 Top Lights	**3650S**	37	**60.93**	**3650R**	33	**60.93**
4 Top Lights	**3575S**	33	**77.22**	**3575R**	39	**77.22**
5 Top Lights	**3675S**	37	**90.77**	**3675R**	32	**90.77**

REVERE COMBINATION AREA AND TOP FLOODLIGHTS

Underwriters' Approved

Revere Area Lights and Top Floods are available in steel porcelain enamel finish or Alzak aluminum.

Standard outside color of the porcelain enameled units is red, green, blue, buff or white. Other colors on application. Colors may be selected to suit the color scheme of any individual service station.



Available in one, two, three, four or five light combinations Mounted on Area Light. Combinations consisting of Area Light and Revere No. 3271 R-40 lamp holder.

Unit shown here is No. 3668-S.

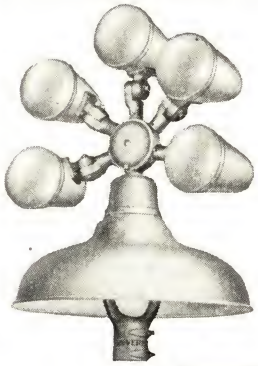
Description	Porcelain Series Cat. No.	Wt.Lbs. Each	Price Each	Aluminum Series Cat. No.	Wt.Lbs. Each	Price Each
1 Top Light	**3468S**	21	**$27.68**	**3468R**	18	**$27.68**
2 Top Lights	**3568S**	24	**35.08**	**3568R**	21	**35.08**
3 Top Lights	**3668S**	27	**42.48**	**3668R**	24	**42.48**
4 Top Lights	**3577S**	28	**52.62**	**3577R**	25	**52.62**
5 Top Lights	**3677S**	30	**60.02**	**3677R**	27	**60.02**

Combinations consisting of Area Light and Revere No. 3281 PAR-38 lamp holder.

Unit illustrated is No. 3576-S.



Description	Porcelain Series Cat. No.	Wt.Lbs. Each	Price Each	Aluminum Series Cat. No.	Wt.Lbs. Each	Price Each
1 Top Light	**3458S**	19	**$23.45**	**3458R**	16	**$23.45**
2 Top Lights	**3558S**	20	**26.62**	**3558R**	17	**26.62**
3 Top Lights	**3658S**	21	**29.79**	**3658R**	18	**29.79**
4 Top Lights	**3576S**	24	**35.70**	**3576R**	21	**35.70**
5 Top Lights	**3676S**	25	**38.87**	**3676R**	22	**38.87**



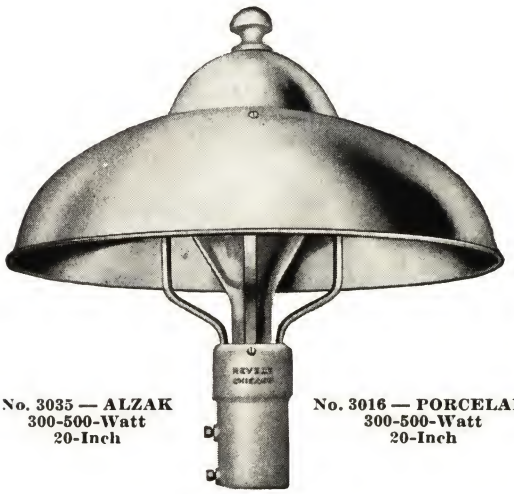
Combination consisting of Area Light and Revere No. 3291 Aluminum or No. 3294 Porcelain open type lamp holder, and No. 3246 cluster fitting.

Unit illustrated No. 3678-S.

Description	Porcelain Series Cat. No.	Wt.Lbs. Each	Price Each	Aluminum Series Cat. No.	Wt.Lbs. Each	Price Each
1 Top Light	**3459S**	22	**$31.78**	**3459R**	18	**$31.78**
2 Top Lights	**3559S**	24	**43.28**	**3559R**	19	**43.28**
3 Top Lights	**3659S**	27	**54.78**	**3659R**	21	**54.78**
4 Top Lights	**3578S**	30	**69.02**	**3578R**	27	**69.02**
5 Top Lights	**3678S**	33	**80.52**	**3678R**	30	**80.52**

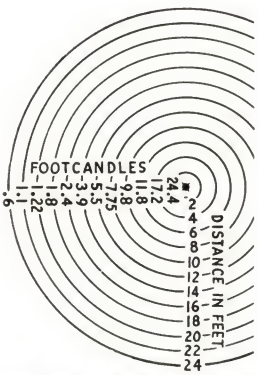
REVERE ISLAND LIGHTERS

ALZAK OR PORCELAIN

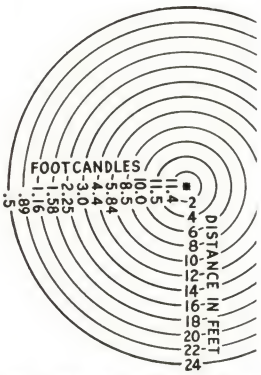


No. 3035 — ALZAK
300-500-Watt
20-Inch

No. 3016 — PORCELAIN
300-500-Watt
20-Inch



No. 3035 Floodlight. Area chart showing light distribution obtained with 500-watt lamp . . . 12-foot mounting height.



No. 3016 Floodlight. Area chart showing light distribution obtained with 500-watt lamp . . . 12-foot mounting height.

Brilliant lighting is more persuasive than words when it comes to gas and oil merchandise — and Revere Island Lighters are designed to furnish it—making oil stations as inviting after dark as they are by day.

The unit illustrated is designed for 300 and 500-watt lamps. Note the pleasing and efficient shape of the reflector, also the sturdy construction of the unit which is characteristic of all Revere lights.

The construction of these units is identical except that the reflector on the No. 3035 is constructed of Alzak Aluminum, while on the No. 3016 it is of Porcelain Enameled steel. The Alzak Reflector is in natural aluminum color. The Porcelain Reflector is white inside and red, green and blue outside as standard finish. All castings are aluminum and all steel parts are plated.

Lamps can be changed without removing the reflector. Both floodlights slip over 2-inch pipe.

Cat. No.	Description	Shpg. Wt. Lbs.	Price Each
3035	300-500-Watt—Alzak	11	**$18.28**
3016	300-500-Watt—Porcelain	14	**18.28**

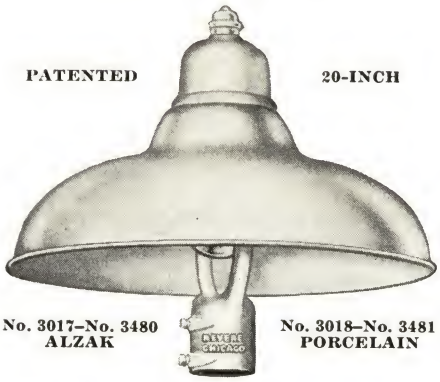
REVERE CONVERTIBLE ISLAND LIGHTER

CONVERTIBLE ISLAND LIGHTER

With Many Advantages

Weather-Proof—Easily Wired—Sturdily Constructed

Underwriters' Approved



No. 3017–No. 3480
ALZAK

No. 3018–No. 3481
PORCELAIN



Use Enclosed Floodlight with ½-inch Fitter

Removing top ornamental ball exposes a ½-inch threaded nipple, on which enclosed floodlights or other lighted devices can be mounted.

Socket location allows lamp to be mounted base up, making possible the highest efficiencies. Lamp readily removed without disturbing reflector.

Reflector designed for beauty, also properly shaped for the highest lighting efficiency.

Cast socket housing supported directly on lower casting and attached to it. It acts as a retainer for the reflector, putting no strain on it. Readily removed, exposing all wiring and connections.

Both arms are oval-shaped to enhance appearance and are also hollow, providing an easy run for wires. The walls of the arms are thickened at their narrowest dimension to provide a sturdy, lasting structure.

The Island Lighters slip over a 2-inch pipe and are held securely in place by two set screws. Bosses are provided in the lower fitter so that the unit aligns and maintains itself true and vertical.

300-500-Watt Size

Cat. No.	Description	Shpg. Wt. Lbs.	Price Each
3017	Island Lighter only with Alzak Reflector	11	**$20.28**
3018	Island Lighter only with Porcelain Reflector	14	**20.28**

750-1000-WATT (BI-POST)

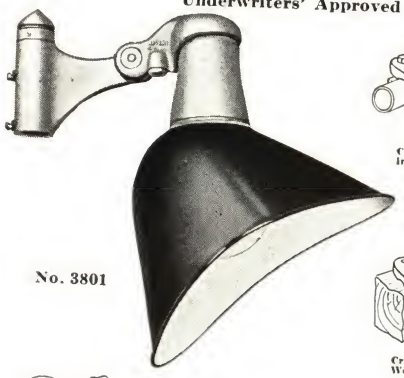
When used as an area light, mount 18 to 24 feet above grade, the area illuminated is extensive and the results are gratifying. This unit can be used on Revere Hinged Poles.

Cat. No.	Description	Shpg. Wt. Lbs.	Price Each
3480	750-1000-Watt, Bi-Post Alzak..	11	**$20.28**
3481	750-1000-Watt, Bi-Post Porc ..	14	**20.28**

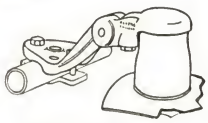
Alzak reflectors always natural finish. Porcelain reflector red or green outside is standard.

REVERE PORCELAIN ELIPTOR FLOODLIGHTS

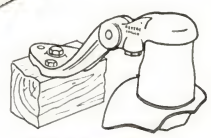
Underwriters' Approved



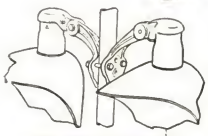
No. 3801



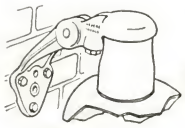
Clamps around 1½ to 2 inch horizontal pipe.



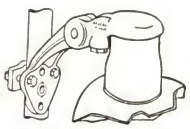
Cross Arm Mounting for Wood or Angle Iron.



Wall Type, clamped back to back for installation on pole.



Wall Mounting.

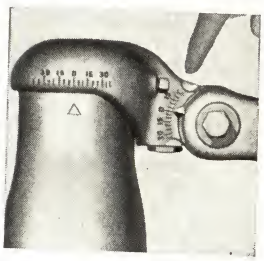


Clamps around 1½ to 2 inch vertical pipe.

Revere Porcelain Eliptor Floodlights for effective, uniform lighting of large and small areas. Ideal for Service Stations, Parking and Used Car Lots, etc.

Streamline construction throughout. Designed for simplified installation, adjustment and servicing. Reflectors of heavy-gauge steel, porcelain-enameled, easily cleaned. All main castings and other parts are cast iron and steel, cadmium-plated.

Mounting arms furnished to slip over 1½-inch or 2-inch pipe, or for wall, cross-arm or pipe-clamp mounting. Floodlights can also be furnished for 750 or 1000-watt Bi-Post or 400-watt Mercury lamps. All iron and steel parts are protected against corrosion with two coats of durable enamel.



The Complete Line of Mounting Brackets Add to Eliptor Utility

Note the unusual versatility of adjustment. Horizontal and vertical adjustments have degree markings for presetting of floodlights and preserving exact settings.

Size Lamps, Watts	Without Inner Reflector Cat. No.	Without Inner Reflector Price Each	With Alzak Inner Reflector Cat. No.	With Alzak Inner Reflector Price Each
1½-Inch Pipe Fitter				
300- 500	3800	$24.35	3820	$28.45
750-1000-1500	3801	25.70	3821	29.80
2-Inch Pipe Fitter				
300- 500	3802	24.35	3822	28.45
750-1000-1500	3803	25.70	3823	29.80
Pipe Clamp Bracket Type				
300- 500	3804	23.00	3824	27.10
750-1000-1500	3805	24.35	3825	28.45
Cross Arm and Wall Bracket Type				
300- 500	3806	21.65	3826	25.75
750-1000-1500	3807	23.00	3827	27.10
***Pendant Mounting for ¾-Inch Pipe**				
300- 500	3808	18.95	3828	23.05
750-1000-1500	3809	20.30	3829	24.40
1 set (2) Bolts and Nuts	3819	.55	3819	.55

*Can be furnished for ½ or 1-inch pipe.

Above lights can be furnished for 750 or 1000-watt T-24 Bi-Post lamps, at an additional price of $4.05. Use the 500-watt numbers and add letter "B" when ordering.

REVERE ALZAK ALUMINUM ELIPTOR FLOODLIGHTS

Underwriters' Approved



No. 3872

This floodlight is a splendid addition to the Revere Line, bringing to users the advantages of Alzak Aluminum reflective efficiency, plus lightness in weight, with resultant lower burden upon mounting mediums. It is easy to clean, easy to install, compact and sturdily constructed, offering a solution to many floodlighting problems.

Socket hood has degree markings for horizontal adjustments. A single set screw in rear controls the settings. Mounting bracket with degree mountings to control any horizontal range of settings.

Vertical adjustments, too, are controlled by a single bolt. Degree markings are provided to preserve vertical settings.

Outstanding among its many features are its degree marked adjustments, all of which are located on the right side. These not only permit easy settings, but afford greater safety when the floodlight is being serviced because all work can be done from one position. The uniquely designed socket hood permits rotating the floodlight right or left offering a 360° horizontal adjustment, plus making it possible to remove the reflector for cleaning without disturbing the wiring or setting. Vertical adjustment is also controlled by a single bolt.

All main castings are aluminum. Reflector is heavy gauge aluminum. Bolts are steel, heavily plated.

Any of the 500-watt floodlights can be used with 400-watt base-up burning Mercury lamps. When using Mercury lamps, care must be exercised to keep the floodlight within 10 degrees of vertical.

300-500 Watt Cat. No.	300-500 Watt Price Each	750-1000 Watt Cat. No.	750-1000 Watt Price Each	Bi-Post 750-1000 Watt Cat. No.	Bi-Post 750-1000 Watt Price Each
Cross Arm and Wall Bracket Mounting					
3851	$24.35	3861	$25.70	3871	$28.40
1½-Inch Slip Fitter Mounting					
3852	27.05	3862	28.40	3872	31.10
2-Inch Slip Fitter Mounting					
3853	27.05	3863	28.40	3873	31.10
Pipe Clamp Bracket Mounting					
3854	25.70	3864	27.05	3874	29.75
Pendant* Mounting for ¾-Inch Pipe					
3859	21.65	3869	23.00	3879	25.70
One Set (2) Bolts and Nuts†					
3819	.55	3819	.55	3819	.55

*Can be furnished for ½ or 1-inch pipe when specified without extra charge.

†For mounting 2 cross arm brackets back to back on 1½-inch or 2-inch pipe.

REVERE ALZAK FLOODLIGHTS
OPEN-TYPE TRIANGULAR

Underwriters' Approved



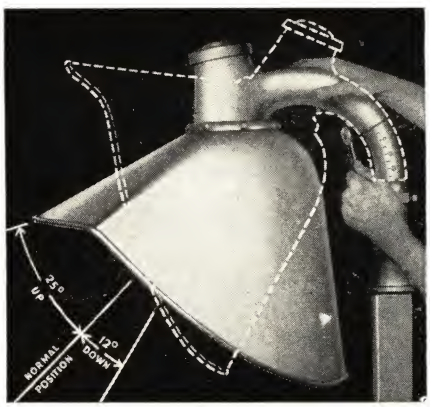
No. 3086
No. 3087
No. 3088

The Best Floodlight for Corner Locations . . . shaped to throw a Definite 90° Beam Pattern.

Especially designed for Corner Lighting. This floodlight is the result of years of experience and specialization by Revere engineers and is a meritorious additional accomplishment in Service Station, Fence or Property Line Lighting. It is the only floodlight made that casts a definite 90-degree beam pattern. The area is controlled by means of the ingenious head and telescopic arm, developed by Revere, which provides vertical adjustment of 37 degrees and a total horizontal range of 360 degrees. This floodlight at corners gives better and more economical coverage than it has ever been possible to obtain heretofore.

Alzak, the most efficient, practical medium is used for the reflector. The entire unit is light in weight and all castings are aluminum. All screws and fittings are of plated steel.

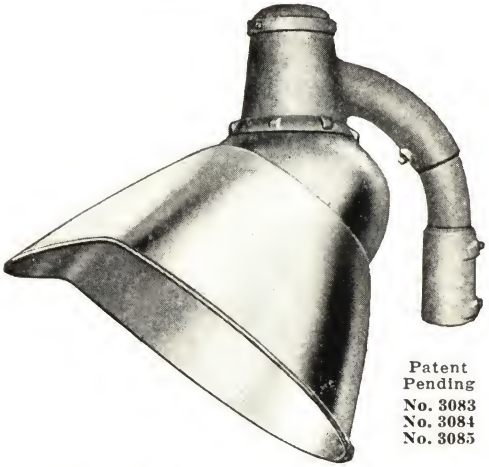
Easily wired and installed. Unique head conceals all wiring yet provides accessibility and ease of installation. It is not necessary to remove socket. Clips hold wire secure and take all strain off socket terminals.



Bi-Post 750-1000W		Incandescent 300-500W		Mercury 400W H-1	
Cat. No.	Price Each	Cat. No.	Price Each	Cat. No.	Price Each
1½ Inch Slip Fitter Mounting					
3086	**$33.85**	**3087**	**$32.50**	**3088**	**$32.50**
2 Inch Slip Fitter Mounting					
3086-A	**33.85**	**3087-A**	**32.50**	**3088-A**	**32.50**
Pipe Clamp Bracket Mounting					
3086-B	**36.56**	**3087-B**	**35.21**	**3088-B**	**35.21**
Wall Mounting					
3086-C	**36.02**	**3087-C**	**34.67**	**3088-C**	**34.67**
Cross Arm Mounting					
3086-D	**35.89**	**3087-D**	**34.53**	**3088-D**	**34.67**

REVERE ALZAK FLOODLIGHTS
OPEN-TYPE

Underwriters' Approved



Patent Pending

No. 3083
No. 3084
No. 3085

Revere Alzak Floodlights meet all requirements. The small size does away with a top-heavy appearance, especially noticeable when more than one floodlight is used on a single pole. The all-aluminum finish gives a fresh, modern, clean-cut appearance to any station.

Smallest size obtainable capable of handling a 1000-watt lamp. Light weight makes it possible to install floodlights on sign poles and add floodlights to existing locations without bringing wind stresses to unsafe limits.

Wiring is simple and accessible. Removable head cover exposes socket terminals. It is not necessary to remove socket. Wire clips secure wires and take all strain off socket terminals. All wires are concealed.

The telescopic arms provide the simplest and most positive vertical adjustment, controlled by one set screw, range 37 degrees. Horizontal adjustment 360 degrees, controlled by two set screws.

Distribution is affected by the shape of the reflector and its finish. The combination of a sphere and two parabolas is used to obtain the effective shape. This gives positive control of the light and by using both a round and a formed shape, two different coverages are made posible. Heavily-etched finish assures proper diffusion of light and assists in control and even distribution. Greater reflection efficiency is accomplished by the use of Alzak, which has the highest reflection efficiency of any practical reflecting medium available for floodlights.

All cast parts are aluminum. All screws plated steel. Reflector is Spun Alzak aluminum.

Round Type—Slips Over 1½-Inch Pipe

Cat. No.	Watts	Type	Shpg. Wt. Lbs.	Price Each
3080	750–1000	Bi-post T-24	13	**$29.79**
3081	300– 500	PS-35 or PS-40	13	**28.44**
3082	400	Mercury H-1....	13	**28.44**

Formed Type—Slips Over 1½-Inch Pipe

Cat. No.	Watts	Type	Shpg. Wt. Lbs.	Price Each
3083	750–1000	Bi-post T-24	13	**$29.79**
3084	300– 500	PS-35 or PS-40	13	**28.44**
3085	400	Mercury H-1....	13	**28.44**

Space here does not permit listings of all mountings available.

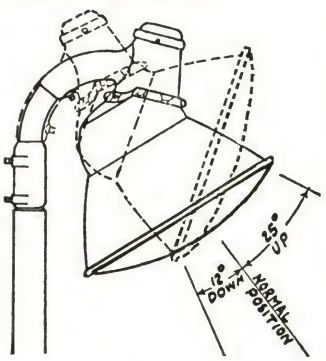
REVERE ALZAK FLOODLIGHTS

ENCLOSED-TYPE



Easily wired and installed. Wiring is simple, accessible and fully enclosed. Removable head cover exposes socket terminals. It is not necessary to remove socket.

Simple Wide-Range Adjustment



The telescopic arms provide simple and positive vertical adjustment (see illustration), controlled by one set screw.

Complete horizontal adjustment 360 degrees is controlled by mounting set screws.

The same spherical-parabolic design which has become so highly favored since its introduction by Revere, offers a high degree of reflective efficiency with the least amount of servicing. Assures proper diffusion of light as well as unusual coverage by more positive control.

A 16⅞-inch heat-resisting convex lens is used together with a felt gasket and aluminum retaining band. All castings are aluminum. All screws and fittings are aluminum alloy, brass or plated steel. The latest T-24 Bi-post Lamp is used in the 750 and 1000-watt floodlight.

(Slips Over 1½-inch Pipe)

Cat. No.	Lamp Size, Watts	Type	Lens	Price Each
3313	750–1000	Bi-Post T-24	Plain	$46.18
3314	300– 500	PS-35 or PS-40	Plain	44.69
3315	400	Mercury H-1	Plain	44.69
3316	750–1000	Bi-Post T-24	Stippled	46.04
3317	300– 500	PS-35 or PS-40	Stippled	44.69
3318	400	Mercury H-1	Stippled	44.69
3319	750–1000	Bi-Post T-24	Ribbed	46.04
3320	300– 500	PS-35 or PS-40	Ribbed	44.69
3321	400	Mercury H-1	Ribbed	44.69

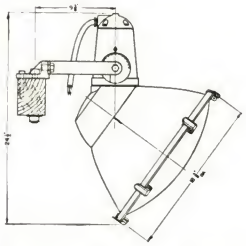
Space here does not permit listings of all mountings available. Hinged-type cover available.

REVERE ALZAK FLOODLIGHTS

ENCLOSED-TYPE



No. 4201-P
No. 4206-P



Designed to offer the utmost in utility — such as: maximum light output through the properly-shaped Alzak reflectors and vertical - burning lamps — a wide choice in beam control — easy cleaning and relamping — hinged-lens ring — weatherproof.

Reflector, lens and housing can be removed for storing without disturbing original setting or focusing. Available with polished reflector or etched reflector for narrow or wide beam and with their plain, stippled or ribbed lens. Equipped with rotating stop and adjustment device.

Lighting Applications

Play Grounds
Posters and Billboards
Protection
Railroad Yards
Refineries
Skating Ponds
Softball (Kitten Ball)
Storage Yards
Swimming Pools
Tank Farms
Toboggan Slides
Aeronautical Obstructions
Baseball
Bathing Beaches
Buildings
Construction
Football
Golf Driving
Gun Clubs
Loading Docks
Lumber Yards

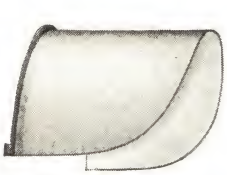
750-1000-1500-Watt

Cat. No. Plain	Mountings	Price Each
	Wide Spread Floodlight	
4200-P	Yoke only	$58.40
4201-P	Cross Arm	59.75
4202-P	Slips Over 1½-inch Pipe	62.40
4203-P	Slips Over 2 -inch Pipe	62.40
4204-P	Clamps 1-inch to 2-inch Pipe	61.10
	Narrow Beam Floodlight	
4205-P	Yoke only	67.80
4206-P	Cross Arm	69.15
4207-P	Slips Over 1½-inch Pipe	71.80
4208-P	Slips Over 2 -inch Pipe	71.80
4209-P	Clamps 1-inch to 2-inch pipe	70.50

Above floodlights complete with mountings listed. Lens 18-inch, plain heat-resisting standard.

Available with stippled lens, add letter "S"; ribbed lens, add letter "R", in place of "P".

REVERE 750-1000-1500 WATT ALZAK ALUMINUM FLOODLIGHT



Visor
No. 3078

Clamp Fitter
for 1" to 2" pipe.

Slip Fitter
for 1½" to 2" pipe.

No. 217-MP Wall or Wood Pole Bracket for use with Cross Arm Mounting, $3.32

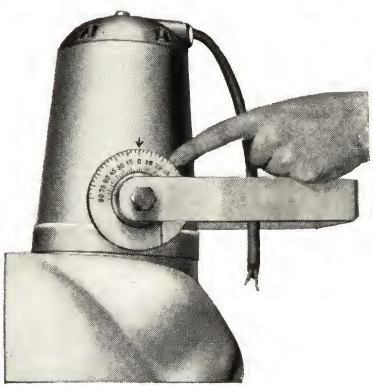
Underwriters' Approved

Here is a floodlight of many uses. Typical applications comprise the lighting of Aeronautical Obstructions, Buildings, Sports and Recreational Areas, Construction Projects, Service Stations with long approach drives, Lumber Yards, Quarries, Billboards, Refineries, Tank Farms, Storage Yards, Smoke Stacks, Prison Yards and other large areas. Its design and construction embody every desirable feature.

Maximum light output is assured by proper design, Alzak aluminum reflectors, and vertical burning lamps. A diffuse (wide beam) or Specular finish (narrow beam) reflector with either clear, stippled or ribbed lens allows a wide choice in beam control. Lens is mounted in a ring which is hinged to the reflector and is also held in place by 5 spring latches against a weatherproof gasket. Entirely weatherproof and dusttight for all positions.

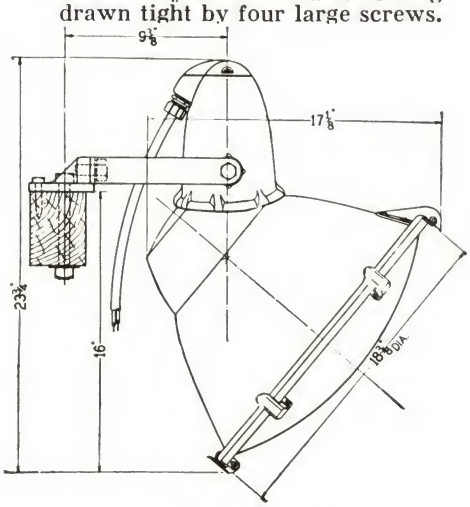
The floodlight is easy to wire and service as the mogul screw socket is attached to removable cap casting which permits complete wiring without handling entire unit.

The reflector is attached to the cast aluminum housing by means of a heavy die formed steel ring drawn tight by four large screws.



Rotation Stop Adjustment

Reflector, lens and housing can be removed for storing by disconnecting wires at the socket terminals. The original setting or focusing of the floodlighting system need not be disturbed. All floodlights furnished with rotation stop and adjustment device, which can be eliminated if not desired.



Mountings	Wide Beam Floodlight				Narrow Beam Floodlight			
	Plain	Stippled	Ribbed	Price	Plain	Stippled	Ribbed	Price
Yoke only	4200-P	4200-S	4200-R	$58.40	4205-P	4205-S	4205-R	$67.80
Cross Arm	4201-P	4201-S	4201-R	59.75	4206-P	4206-S	4206-R	69.15
Slips 1½-inch Pipe	4202-P	4202-S	4202-R	62.40	4207-P	4207-S	4207-R	71.80
Slips 2-inch Pipe	4203-P	4203-S	4203-R	62.40	4208-P	4208-S	4208-R	71.80
Clamps 1 to 2-inch Pipe	4204-P	4204-S	4204-R	61.10	4209-P	4209-S	4209-R	70.50

Approx. Beam Spreads—Wide Beam: Plain 68°; Stippled 85°; Ribbed 70° x 98°.
Narrow Beam: Plain 35°; Stippled 48°; Ribbed 36° x 58°.

Glass Only—No. 4686 Plain Lens, **No. 4688** Stippled Lens, **No. 4687** Ribbed Lens, each **$16.25.**

Adapter—No. 4223 Adapter to change floodlight to use 1000 or 1500 Watt G-bulb. Floodlight Lamps, **$2.71.**

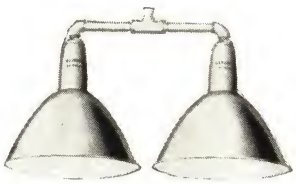
For Foodlights without Rotation Stop and Vertical Adjusting Device—deduct **$2.71** from list price of regular floods.

REVERE INDUSTRIAL LIGHTING

High, Medium and Low Bay Lighting Units

Cat. No. 6603





COMBINATION TWIN-LITE

Whenever higher intensities are required, or when a combination of Incandescent and Mercury Lamps is desired, one No. 5624 and one No. 5629, or one No. 6604 and one No. 6610 unit can be mounted together as shown above. The assembly may be supported from ½-inch conduit.

With the growing demand for better illumination in the vast industries of America, Revere offers this outstanding line of reflectors to fulfill every requirement.

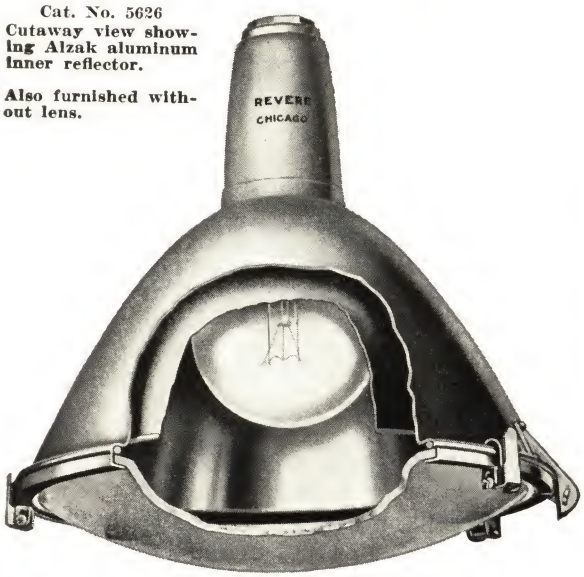
The beam spread in porcelain enamel or Alzak aluminum reflectors provide a range of results to correctly illuminate every shape and size of room.

ALZAK ALUMINUM REFLECTORS

Cat. No.	LAMP Watts	LAMP Type	Cover Glass	Diam. Inches	Class Use	Reflector	Price Each
6601	750-1000	Inc.	None	18	Low Bay	Alzak	$24.55
6603	750-1000	Inc.	Herculite	18	Low Bay	Alzak	49.94
6604	750-1000	Inc.	None	18	Med. Bay	Alzak	24.55
6606	750-1000	Inc.	Herculite	18	Med. Bay	Alzak	49.94
6607	750-1000	Inc.	None	18	High Bay	Alzak	27.08
6609	750-1000	Inc.	Herculite	18	High Bay	Alzak	52.47
6610	400	Mer.	None	18	Med. Bay	Alzak	24.55
6612	400	Mer.	Herculite	18	Med. Bay	Alzak	49.94
6613	400	Mer.	None	18	High Bay	Alzak	27.08
6615	400	Mer.	Herculite	18	High Bay	Alzak	52.47
6616	300-500	Inc.	None	14	Low Bay	Alzak	17.60
6618	300-500	Inc.	Herculite	14	Low Bay	Alzak	34.53
6619	300-500	Inc.	None	14	Med. Bay	Alzak	17.60
6621	300-500	Inc.	Herculite	14	Med. Bay	Alzak	34.53
6622	300-500	Inc.	None	14	High Bay	Alzak	21.17
6624	300-500	Inc.	Herculite	14	High Bay	Alzak	38.09
6626	250	Mer.	Herculite	14	Med. Bay	Alzak	34.53
6628	250	Mer.	Herculite	14	High Bay	Alzak	38.09
6651	Twin-Lite 750-1000W. Incand. and 400 W. Mercury		None	18	Low Bay	Alzak	57.39
6653			Herculite	18	Low Bay	Alzak	108.17
6654			None	18	Med. Bay	Alzak	57.39
6656			Herculite	18	Med. Bay	Alzak	108.17
6657			None	18	High Bay	Alzak	62.47
6659			Herculite	18	High Bay	Alzak	113.25
6661	Twin-Lite 300-500W. Incand. and 250W. Mer.		Herculite	14	Low Bay	Alzak	77.36
6663			Herculite	14	Med. Bay	Alzak	77.36
6665			Herculite	14	High Bay	Alzak	84.47

Cat. No. 5626
Cutaway view showing Alzak aluminum inner reflector.

Also furnished without lens.



STEEL PORCELAIN ENAMEL

With Alzak Aluminum Reflectors

Cat. No.	LAMP Watts	LAMP Type	Cover Glass	Diam. Inches	Class Use	Reflector	Price Each
5621	750-1000	Inc.	None	18	High Bay	Alzak	$42.32
5623	750-1000	Inc.	Herculite	18	High Bay	Alzak	67.71
5624	750-1000	Inc.	None	18	Med. Bay	Alzak	42.32
5626	750-1000	Inc.	Herculite	18	Med. Bay	Alzak	67.71
5646	750-1000	Inc.	None	18	Low Bay	Porc.	14.73
5628	750-1000	Inc.	Herculite	18	Low Bay	Porc.	40.12
5629	400	Mer.	None	18	Med. Bay	Alzak	42.32
5631	400	Mer.	Herculite	18	Med. Bay	Alzak	67.71
5647	400	Mer.	None	18	Low Bay	Porc.	14.73
5633	400	Mer.	Herculite	18	Low Bay	Porc.	40.12
5634	300-500	Inc.	None	14	Med. Bay	Alzak	35.55
5636	300-500	Inc.	Herculite	14	Med. Bay	Alzak	52.47
5637	300-500	Inc.	None	14	Low Bay	Porc.	11.01
5639	300-500	Inc.	Herculite	14	Low Bay	Porc.	27.94
5640	Twin-Lite 750-1000W. Incand. and 400W. Mer.		None	....	Med. Bay	Alzak	92.94
5642			Herculite	....	Med. Bay	Alzak	143.72
5643			None	....	Low Bay	Porc.	37.75
5645			Herculite	....	Low Bay	Porc.	88.54

Wire Protection Guards can be furnished for all above units, information on request.



Nos.
199-G20
199-G24

REVERE SQUARE HINGED FLOODLIGHT POLES

To appreciate the lasting economy and merit of Revere Hinged Floodlight Poles requires only the realization that they permit the easy, safe, and inexpensive removal of dirt from the reflecting surfaces of high mounting floodlights.

The lower section of this Pole is 3 inches and the upper section is 2½ inches square seamless steel tubing. The counter-balance arm is made up of two ⅜-inch x 2½-inch, side bars bridged and proportioned to approximately balance the weight of the average floodlight.

All Revere Hinged Floodlight Poles are finished with a 2-inch short threaded top nipple. By applying the proper bracket or terminal to the top, the Pole can be adapted for any make of floodlight.

Base and Bolt Type

Four ¾ x 30-inch anchor bolts with nuts and lock washers are furnished with Base and Bolt Type without additional charge. The pole is finished at the bottom with an ornamental steel base securely welded to the shaft. In this type, a liberal size wire opening with a removable cover is provided 10 inches from base bottom.

Concrete Type

When furnished for concrete mounting the lower section of the Pole is imbedded three feet in the concrete foundation. This Pole is drilled and tapped 10 inches above foundation line for ¾-inch pipe.

Replacement Type

The Replacement Type Pole is designed for use on existing installations with very little expense. It is furnished with a sleeve at the bottom which will slip over either 3½-inch or 4-inch O.D. pipe. The old pole is cut off 20 inches above grade. The Replacement Pole is dropped down over the stub, and the set screws are tightened.

Due to the unique construction of the lower sleeve, it will wedge itself at the top with the old pole stub and perfect alignment is made by adjusting the set screws. It is not necessary to pre-determine the position of the pole in order to line up the wiring outlet of the old feed which served the rigid pole. Four ½-inch openings are provided, three of which are furnished with flush plugs permitting mounting the Pole in any position. It is recommended that the stub of the old pole be reinforced by filling same with concrete.

Base and Bolt Mounting Type

No.	Capacity	Mounting Height	Wt. Lbs. Each	List Price
199-G20	1 or 2 Floods	20′	157	**$67.71**
199-G24	1 or 2 Floods	24′	193	**75.16**

Concrete Mounting Type

No.	Capacity	Mounting Height	Wt. Lbs. Each	List Price
199-20	1 or 2 Floods	20′	174	**$63.78**
199-24	1 or 2 Floods	24′	196	**69.33**

Replacement Mounting Type

No.	Capacity	Mounting Height	Wt. Lbs. Each	List Price
199-R20	1 or 2 Floods	20′	159	**$69.74**
199-R24	1 or 2 Floods	24′	195	**75.43**

Floodlight Brackets

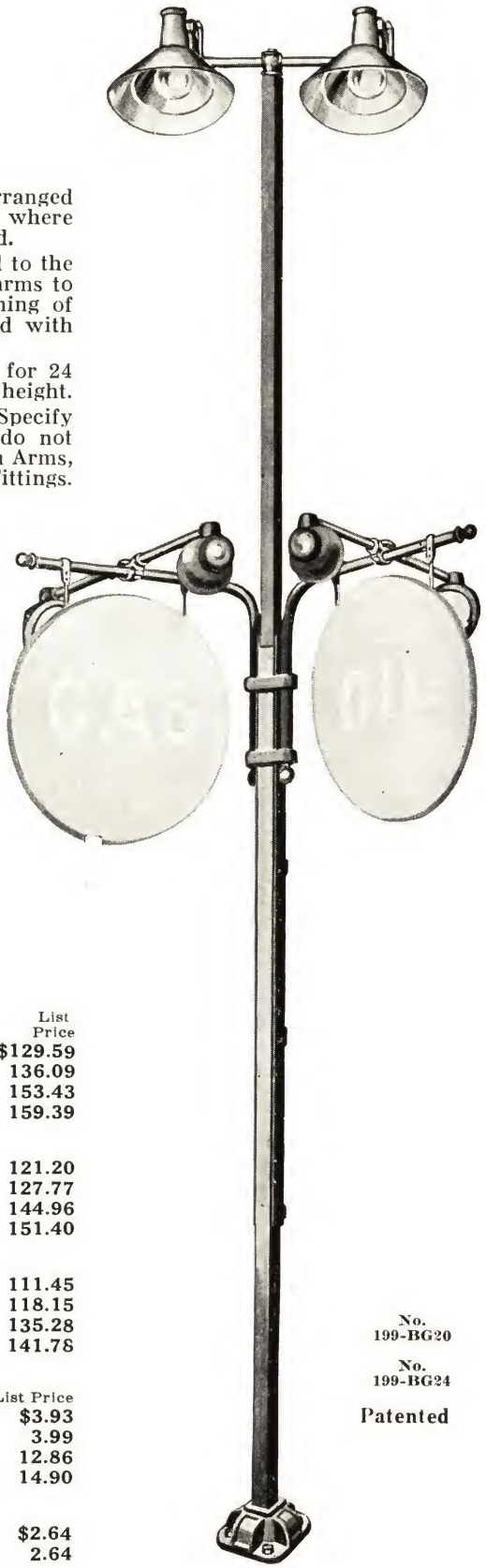
199-H	1½″ Terminal	1 Flood	3	**$3.93**
199-I	2″ Terminal	1 Flood	3	**3.99**
199-J	1½″ Terminals	2 Floods	11	**12.86**
199-K	2″ Terminals	2 Floods	15	**14.90**

Lowering Chain Listings

No. **199-CH20** For 20-Foot Pole.....**$2.64** No. **199-CH24** For 24-Foot Pole.....**$2.64**

Lowering chain is not included and is listed separately. Specify quantity and catalog number on order.

REVERE SQUARE HINGED FLOODLIGHT POLES



No. 199-BG20

No. 199-BG24

Patented

FOR SIGNS AND FLOODLIGHTS

Illustration shows how the Revere Hinged Pole can be arranged to accommodate both signs and floodlights. On all poles where signs are installed the lower sections are heavily reinforced.

The sign arms are supported by two steel castings welded to the pole and it is possible with this arrangement to swing the arms to any position. This adjustment feature permits the positioning of the sign to the best advantage. Instruction sheet furnished with each pole gives proper installation details.

Sign Arms are 15 feet from the grade line on standards for 24 foot mounting height and 13 ft. 18 in. for 20 foot mounting height.

Lowering chain is not included and is listed separately. Specify quantity desired and catalog number on order. Listings do not include floodlights, signs, or sign hangers. Poles include Sign Arms, 100-watt Sign Reflectors, Reflector Arms and Reflector Arm Fittings.

Base and Bolt Type

Four ¾ x 30 in. anchor bolts with nuts and lock washers are furnished with Base and Bolt Type without additional charge. The pole is finished at the bottom with an ornamental steel base securely welded to the shaft. In this type, a liberal size wiring opening with removable cover is provided 10 in. from base bottom.

Concrete Type

When furnished for concrete mounting the lower section of the Pole is embedded 3 ft. in the concrete foundation. This pole is drilled and tapped 10 inches above foundation for ¾ in. pipe.

Replacement Type

Is designed for use on existing installations with very little expense. It is furnished with a sleeve at the bottom which will slip over either 3½ in. or 4 in. O.D. pipe. The old pole is cut off 20 inches above grade. The Replacement Pole is dropped down over the stub and set screws tightened. Complete information on request.

Base and Bolt Mounting Type

Pole No.	Capacity	Pole Equipped With	Mtg Hght. Ft.	Approx. Wt.Lbs.	List Price
199-AG20	1 or 2 Floods	1-Sign Arm Complete	20	240	**$129.59**
199-AG24	1 or 2 Floods	1-Sign Arm Complete	24	290	**136.09**
199-BG20	1 or 2 Floods	2-Sign Arms Complete	20	272	**153.43**
199-BG24	1 or 2 Floods	2-Sign Arms Complete	24	305	**159.39**

Concrete Mounting Type

199-A20	1 or 2 Floods	1-Sign Arm Complete	20	258	**121.20**
199-A24	1 or 2 Floods	1-Sign Arm Complete	24	273	**127.77**
199-B20	1 or 2 Floods	2-Sign Arms Complete	20	283	**144.96**
199-B24	1 or 2 Floods	2-Sign Arms Complete	24	319	**151.40**

Replacement Mounting Type

199-RA20	1 or 2 Floods	1-Sign Arm Complete	20	235	**111.45**
199-RA24	1 or 2 Floods	1-Sign Arm Complete	24	285	**118.15**
199-RB20	1 or 2 Floods	2-Sign Arms Complete	20	267	**135.28**
199-RB24	1 or 2 Floods	2-Sign Arms Complete	24	300	**141.78**

FLOODLIGHT BRACKETS

No.	Capacity	Type	Wt. Lbs.	List Price
199-H	1—Floodlight	1½-in. Terminal	3	**$3.93**
199-I	1—Floodlight	2-in. Terminal	3	**3.99**
199-J	2—Floodlights	1½-in. Terminals	11	**12.86**
199-K	2—Floodlights	2-in. Terminals	15	**14.90**

LOWERING CHAIN

199-CH-20	For 20-Foot Pole	**$2.64**
199-CH-24	For 24-Foot Pole	**2.64**

REVERE HEAVY-DUTY SQUARE TAPERED HINGED POLES

FOR FLOODLIGHTS AND SIGNS



199-F-20
199-F-24
Patented

This sturdy tapered Revere Pole was particularly developed to carry sign arms as well as floodlights, the weight of which would be beyond the capacity of the popular "non-tapered" Series of Revere Hinged Poles. Its graduated shaft is perfectly suited to hinged floodlight-pole design and its simple lines harmonize with modern "streamlined" service station architecture. The pole is constructed of 10 gauge steel. Available in 20 and 24-ft. mounting heights, as listed.

Size and Description

The poles for 20 and 24 ft. mounting, measure 4¾ in. square at grade. All Poles measure 2⅜ in. square at the top and are finished with a 2 in. threaded nipple to take the floodlight brackets for one or two floodlights as listed below.

Base and Bolt Mounting

All Base and Bolt Mounting Poles are furnished with four ¾ x 30 in. bolts and nuts for installation. Wire opening with removable cover is provided in base.

Base and Bolt Type

Pole No.	Capacity	Pole Equipped With	Mntg. Hght. Feet	Approx. Wt. Lbs.	List Price
199-F20	1 or 2 Floods	1 Sign Arm	20	262	**$149.77**
199-F24	1 or 2 Floods	1 Sign Arm	24	292	**157.96**
199-N20	1 or 2 Floods	2 Sign Arms	20	305	**166.17**
199-N24	1 or 2 Floods	2 Sign Arms	24	335	**174.20**

Lowering Chain Listings

No. 199-CH-20	For 20 Ft. Poles	**$2.64**
No. 199-CH-24	For 24 Ft. Poles	**2.64**
No. 199-CH-30	For 30 Ft. Poles	**3.11**



Adjustable sign arms similar to those used on the No. 199 series floodlight Poles are furnished. The sign arm is made of 1½ in. extra strong pipe to accommodate the larger and heavier signs. Height of sign arms from grade on 20 ft. poles is 13 ft. 18 in. On poles of 24 ft. height the arms are 15 ft. from grade line.

FOR FLOODLIGHTS ONLY

The description of the 20 and 24 ft. mounting poles is the same as described above. The 30 ft. mounting poles have fabricated steel plate base which is welded in position. Four ⅞ x 36 in. bolts with nuts are furnished. A 4½ in. center hole is provided in this base for bringing in service conduit.

No.	Capacity	Mntg. Hght.	Wt. Lbs.	List Price
199-E20	1, 2 or 3 Floods	20′	217	**$118.49**
199-E24	1, 2 or 3 Floods	24′	248	**126.61**
199-D30	1, 2 or 3 Floods	30′	324	**175.00**

Lowering Chain Listings

No. 199-CH-20	For 20 Ft. Poles.....	**$2.64**
No. 199-CH-24	For 24 Ft. Poles.....	**2.64**
No. 199-CH-30	For 30 Ft. Poles.....	**3.11**

Floodlight Brackets

No.	Type	Capacity	Wt. Lbs.	Price
199-H	1½" Terminal	1 Floodlight	3	**$3.93**
199-I	2" Terminal	1 Floodlight	3	**3.99**
199-J	1½" Terminals	2 Floodlights	11	**12.86**
199-K	2" Terminals	2 Floodlights	15	**14.90**
199-L	1½" Terminals	3 Floodlights	14	**14.62**
199-M	2" Terminals	3 Floodlights	18	**15.17**



No. 199-E20
No. 199-E24
No. 199-D30
Patented

REVERE ROUND-TYPE HINGED FLOODLIGHT POLES



No. 300-L20

To provide a Hinged Floodlight Pole that would harmonize and match with equipment already installed, we offer this Round-type, which is a very well proportioned unit.

The 2 in. pipe at the extreme top of the pole is threaded for mounting any of the floodlight brackets listed below.

The Pole is available with single or double Sign Arms which are adjustable, thus permitting rotation to exact position. The steel castings to which these arms are attached are welded to the lower section. Height of Sign Arms from grade on 20 foot Poles is 13 ft. 8 in. On Poles of 24 foot height, the Arms are 15 feet from grade. On all Poles where Sign Arms are installed, the lower sections are heavily reinforced.

Be sure to order proper floodlight brackets for your pole as listed below. Poles with signs, include sign arms, sign reflectors, reflector arms and reflector arm fittings as listed.

The hinge castings are steel, securely welded to both sections. The bottom of the top section is so arranged that it is held securely in place when the floodlight is raised. Provision is made for use of a padlock. A set of four ¾ in. x 30 in. anchor bolts with nuts is furnished with the Base and Bolt Mounting Type Pole

Base and Bolt Mounting Type

No.	Capacity	Pole Equipped With	Mounting Hght. Ft.	Approx. Wt.Lbs.	List Price
300-L20	1 or 2 Floods		20	167	**$89.37**
300-L24	1 or 2 Floods		24	192	**113.07**
300-AL20	1 or 2 Floods	1-Sign Arm Complete	20	225	**139.61**
300-AL24	1 or 2 Floods	1-Sign Arm Complete	24	261	**166.07**
300-BL20	1 or 2 Floods	2-Sign Arms Complete	20	258	**162.91**
300-BL24	1 or 2 Floods	2-Sign Arms Complete	24	294	**187.15**

Concrete Mounting Type

300-CL20	1 or 2 Floods		20	190	**86.67**
300-CL24	1 or 2 Floods		24	212	**110.36**
300-CAL20	1 or 2 Floods	1-Sign Arm Complete	20	286	**138.12**
300-CAL24	1 or 2 Floods	1-Sign Arm Complete	24	320	**166.16**
300-CBL20	1 or 2 Floods	2-Sign Arms Complete	20	319	**161.15**
300-CBL24	1 or 2 Floods	2-Sign Arms Complete	24	353	**187.69**

Concrete Sleeve Insert Mounting Type

300-CLX20	1 or 2 Floods		20	215	**102.92**
300-CLX24	1 or 2 Floods		24	237	**126.61**
300-CALX20	1 or 2 Floods	1-Sign Arm Complete	20	301	**154.37**
300-CALX24	1 or 2 Floods	1-Sign Arm Complete	24	335	**182.41**
300-CBLX20	1 or 2 Floods	2-Sign Arms Complete	20	334	**177.40**
300-CBLX24	1 or 2 Floods	2-Sign Arms Complete	24	368	**203.12**

Concrete sleeve included in above listing.

Replacement Mounting Type

300-RL20	1 or 2 Floods		20	162	**105.96**
300-RL24	1 or 2 Floods		24	187	**129.66**
300-RAL20	1 or 2 Floods, 1-Sign Arm	1-Sign Arm Complete	20	236	**156.20**
300-RAL24	1 or 2 Floods, 1-Sign Arm	1-Sign Arm Complete	24	270	**182.68**
300-RBL20	1 or 2 Floods, 2-Sign Arms	2-Sign Arms Complete	20	266	**179.49**
300-RBL24	1 or 2 Floods, 2-Sign Arms	2-Sign Arms Complete	24	302	**203.73**

Concrete Sleeves (Only)

No.	For Pipe Inches	For O.D. Tube, In.	Sleeve Depth	List Price	No.	For Pipe Inches	For O.D. Tube, In.	Sleeve Depth	List Price
35-X	3	3½	2′–6″	On	**60-X**	5	5½	5′	On
40-X	3½	4	2′–6″	Re-	**70-X**	6	6.6	6′	Re-
45-X	4	4½	5′	quest	**80-X**	7	7.7	7′	quest
50-X	4½	5	5′		**90-X**	8	8.6	7′	

Floodlight Brackets

No.	Type	Capacity	Wt. Lbs.	Price
199-H	1½ in. Terminal	1-Floodlight	3	**$3.93**
199-I	2 in. Terminal	1-Floodlight	3	**3.99**
199-J	1½ in. Terminals	2-Floodlights	11	**12.86**
199-K	2 in. Terminals	2-Floodlights	15	**14.90**

Lowering Chain Listings

No. 300-CH-20	For 20 Ft. Poles	**$2.64**
No. 300-CH-24	For 24 Ft. Poles	**3.11**



No. 204-L

REVERE COMBINATION SERVICE STANDARD AND HINGED FLOODLIGHT POLE

Revere Combination Standards are designed to meet the demand for a pole to carry high mounting floodlights as well as to provide water and air service facilities.

Quite often there are no locations available for a High Mounting Pole on the outskirts of the service station lot, and frequently the best lighting of the approaches can be accomplished only with high mounting floodlights located at the island.

The two styles of Poles illustrated embody the Revere Medium Duty Square Hinged Pole construction. Floodlight mounting heights are 20 to 24 feet. The Octagon type No. 204-I and 204-J, should be used in conjunction with the Octagon Type DeLuxe Island Light Standards. The lower sections are equipped with water and/or air service. Note that two styles of bases are available. By using hose connections inside the pole at the bottom, a more simple and less expensive air and water service can be had. Listings on the Octagon Standards include water and/or air hose, but no air chuck, water faucet or floodlights.

Switches or receptacles are not included. These accessories are available at an extra charge. Anchor bolts, ¾ in. x 30 in., nuts and lock washers are furnished without extra charge for all Standards listed below. It is necessary to order proper extensions for one or two floodlights.

DE LUXE OCTAGON POLE (Ornamental Base)
Capacity—1 or 2 Floods

No.	Service	Mounting Height	Wt. Lbs. Each	List Price
204-I-20	Water and Air	20 ft.	199	**$133.25**
204-I-24	Water and Air	24 ft.	224	**138.94**
204-J20	Water	20 ft.	195	**111.38**
204-J24	Water	24 ft.	220	**116.93**
204-K20	Air	20 ft.	195	**117.81**
204-K24	Air	24 ft.	220	**123.36**

DE LUXE OCTAGON POLE (Small Base)
Capacity—1 or 2 Floods

No.	Service	Mounting Height	Wt. Lbs. Each	List Price
204-IX20	Water and Air	20 ft.	192	**$123.64**
204-IX24	Water and Air	24 ft.	217	**129.19**
204-JX20	Water	20 ft.	188	**101.49**
204-JX24	Water	24 ft.	213	**107.11**
204-KX20	Air	20 ft.	188	**108.33**
204-KX24	Air	24 ft.	213	**113.95**

CORRUGATED POLE (Small Base)
Capacity—1 or 2 Floods

No.	Service	Mounting Height	Wt. Lbs. Each	List Price
204-L20	Water and Air	20 ft.	195	**$101.97**
204-L24	Water and Air	24 ft.	220	**107.52**
204-M20	Water	20 ft.	191	**93.51**
204-M24	Water	24 ft.	216	**99.06**
204-N20	Air	20 ft.	191	**93.71**
204-N24	Air	24 ft.	216	**99.26**

LOWERING CHAIN LISTINGS

No. 199-CH-20	For 20 Ft. Pole	**$2.64**
No. 199-CH-24	For 24 Ft. Pole	**2.64**



No. 204-I

REVERE DELUXE ISLAND LIGHTER AND SERVICE LIGHT STANDARDS



No. 203-O

Every effort has been expended to make these Standards as distinctive and practical as possible, also to permit easy and economical installation.

The lower octagon section of these Standards is made of 10 gauge steel octagon tubing, which, on the base and bolt type illustrated, is welded to an ornamental steel base with ornamental covers for the foundation bolts and nuts. The reducer casting is designed to make the upper and lower sections harmonize. It is of steel, welded to the shaft, and threaded to accommodate the upper section of 2-in. standard steel pipe. By using a small base, a less expensive Standard, as listed below, is available with all other DeLuxe advantages. These same standards can be furnished for concrete mounting. In this case no base is provided and the shaft extends 2 feet below the top of the concrete.

By using hose connections inside the pole at the bottom, a simpler and less expensive air and water service can be had.

Standards are equipped with 12½ feet of ¼ in. hose for water, and 21½ ft. for air. The hose extends directly from the service outlet through the wall of the Standard without any piping. It is held in place and cushioned by a compression rubber sleeve, which allows no movement and eliminates wear at this point. The air hose is provided with a ¼ in. male threaded fitting, at its outer end, ready to be attached to any type of air gauge or chuck. The water hose terminates in a ¾ in. male threaded fitting to accommodate any standard faucet.

Complete description of these Standards will be supplied upon request.



No. 204-T

With Ornamental Base

No.	Description	Wt. Lbs.	Price
203-O	Light only, 4⅜ in. O.D.	65	$47.67
204-T	Water, air and light, 5 in. O.D.	74	81.32
204-U	Water and light, 5 in. O.D.	71	59.38
204-V	Air and light, 5 in. O.D.	71	66.02
204-W	Light only, 5 in. O.D.	70	44.08
204-D	1 Set (4) ⅝x12 in. Foundation Bolts	6	2.64

With Small Base

203-OX	Light only, 4⅜ in. O.D.	58	37.24
204-TX	Water, air and light, 5 in. O.D.	67	71.64
204-UX	Water and light, 5 in. O.D.	65	49.63
204-VX	Air and light, 5 in. O.D.	64	62.43
204-WX	Light only, 5 in. O.D.	63	33.99
204-D	1 Set (4) ⅝x12 in. Foundation Bolts	6	2.64

Concrete Mounting

203-OC	Light only, 4⅜ in. O.D.	70	37.24
204-TC	Water, air and light, 5 in. O.D.	99	76.31
204-UC	Water and light, 5 in. O.D.	96	54.71
204-VC	Air and light, 5 in. O.D.	96	61.34
204-WC	Light only, 5 in. O.D.	95	40.35

REVERE SERVICE AND ISLAND LIGHT STANDARDS



No. 204

No. 203 ISLAND LIGHTER STANDARDS

These Standards when used in conjunction with the Revere Island Lighters make it possible to light station islands, entrance and air service locations completely.

The full corrugated Standard is constructed of 3½-inch and 2⅝-inch O.D. corrugated tubing with a 2-inch pipe terminal at the top. The other Standard has 3½-inch corrugated tubing in the lower section with a steel adapter casting welded at the top, into which is screwed the 2-inch pipe, which forms the upper section.

When furnished for concrete mounting the lower section of the Pole is imbedded 2 feet in the concrete foundation. Pole is drilled and tapped 10 inches above foundation line for ¾-inch conduit.

On the base and bolt mounting, a wiring opening is provided 4¾ inches from the grade line. The replacement type is arranged at the bottom, similar to the No. 199-R Pole.

Switches or receptacles can be used to advantage on these Standards. They are not included in the listings and must be ordered separately. When ordered with Standards, drilling and tapping for their installation will be provided.

All Standards listed below place the light center of the floodlight 12 feet above grade. Island Lighters and Foundation Bolts are not included in the listings and must be ordered separately.

Corrugated Standards

No.	Description	Wt. Lbs. Each	List Price
203-B	For Base and Bolt mounting, without slip base	53	**$34.26**
203-F	For Base and Bolt mounting, with slip base	87	**46.18**
203-G	For Concrete mounting, without slip base	63	**31.28**
203-H	For Concrete mounting, with slip base	97	**44.69**
203-I	Replacement type	62	**37.24**
	(Corrugated with Round Upper Section)		
203-M	For Base and Bolt mounting	53	**32.03**
203-N	For Concrete mounting	62	**29.05**
203-R	Replacement type	62	**34.56**
203-J	1 set (4) foundation bolts, ⅝"x12" with nuts	6	**2.64**

No. 204 SERVICE AND ISLAND LIGHTER STANDARDS

For use on Pump Islands and other areas in combination with Island Lights. They are available in many styles, with or without air or water dispensing facilities and are logical aids in the promotion of efficiency and in making Service Stations more iniviting.

Among the styles listed is a Double Air Standard for locations other than the pump island. Due to the fact that the space usually allotted for air service is sufficient for two cars, double service at this point will be much appreciated by the motorist who dislikes to be inconvenienced by waiting.

Construction details are as follows: Lower section is a 5-in. corrugated steel tube, with an ornamental steel reducer casting welded in place for screwing on the upper shaft, made of 2-inch steel pipe.

All Standards listed place the light center of the Island Light approximately 12 feet above the grade. The facilities for handling air hose and water hose are most practical and convenient. While no hose or hose fittings are furnished, water and air pipes with elbows and nipples and ground joint unions are furnished. The piping is welded in place in the Standards, ready to connect to the service piping through a large door near the grade line.

Description and Service	Base and Bolt Mounting No.	Wt. Lbs. Each	List Price	Concrete Mounting No.	Wt. Lbs. Each	List Price
Light, Water and Air	**204**	68	**$48.07**	**204-O**	83	**$48.07**
Light and Water	**204-A**	64	**45.50**	**204-P**	85	**45.50**
Light and Air	**204-B**	65	**45.03**	**204-Q**	84	**45.03**
Light and Double Air	**204-BB**	70	**47.40**	**204-QQ**	89	**47.40**
Light only	**204-C**	60	**39.37**	**204-R**	79	**37.37**
One Set (4) ⅝"x12" foundation Bolts and Nuts	**204-D**	6	**2.64**	.....	....	.....

REVERE PYLON-LITE STANDARDS



No. 1966

PYLON-LITE WITH CORRUGATED BASES

This Island Lighter originated by Revere creates an atmosphere of refinement at the sales area, imparting a rich glow of light through the glass column by means of fluorescent lamps. Cluster lights in any combination up to five floods can also be mounted on top of area lighter or on standard.

Area light and top floods can be had in any color to match service station, a distinctive advantage. Lamps operate properly under any weather conditions. Opaque letters can be applied on inside of glass at a slight additional charge.

Without Pipe Stub

Cat. No.	Description	Wt. Lbs. Each	Price Each
1966	3½-in. Corrugated Base	196	**$182.13**
1967	5-in. Corrugated Base	190	**187.03**
1967-A	5-in. Corrugated Base-Air	194	**193.77**
1967-W	5-in. Corr. Base-Water	194	**194.69**
1967-AW	5-in. Corr. Base-Air-Water	196	**198.68**

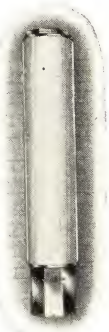
With 2-Inch Pipe Stub

1964	3½-in. Corrugated Base	196	**183.36**
1965	5-in. Corrugated Base	190	**188.26**
1965-A	5-in. Corrugated Base-Air	194	**195.00**
1965-W	5-in. Corr. Base-Water	194	**195.92**
1965-AW	5-in. Corr. Base-Air-Water	196	**199.91**

CLAMP-AROUND AND WALL TYPES

Clamp-around type No. 1962 for mounting on old poles.

Wall type No. 1960 may also be used for clamping on No. 203M Standards.


No. 1960


No. 1962

Cat. No.	Description	Wt. Lbs. Each	Price Each
1960	Wall Mounting	73	**$106.70**
1962	3-inch Pipe	146	**213.40**
1962–25	2½-inch Pipe	146	**213.40**
1962–2	2-inch Pipe	146	**213.40**

REVERE PYLON-LITE STANDARDS


No. 1953

PYLON-LITES FOR CONVERTING CONVENTIONAL STANDARDS

No Mounting Pipe is Furnished

Without Pipe Stub

Cat. No.	Pipe Size Inches	Wt. Lbs. Each	Price Each
1953	2	141	**$160.66**
1953-25	2½	144	**168.02**
1953-3	3	144	**168.02**
1953-35	3½	145	**168.64**
1953-4	4	145	**168.64**
1953-45	4½	146	**169.25**
1953-5	5	146	**169.25**

With 2-Inch Pipe Stub

1954	2	142	**161.89**
1954-25	2½	145	**169.25**
1954-3	3	145	**169.25**
1954-35	3½	146	**169.87**
1954-4	4	146	**169.87**
1954-45	4½	147	**170.48**
1954-5	5	147	**170.48**

PYLON-LITE STANDARDS


No. 1948-R


No. 1948-AW

Without Pipe Stub

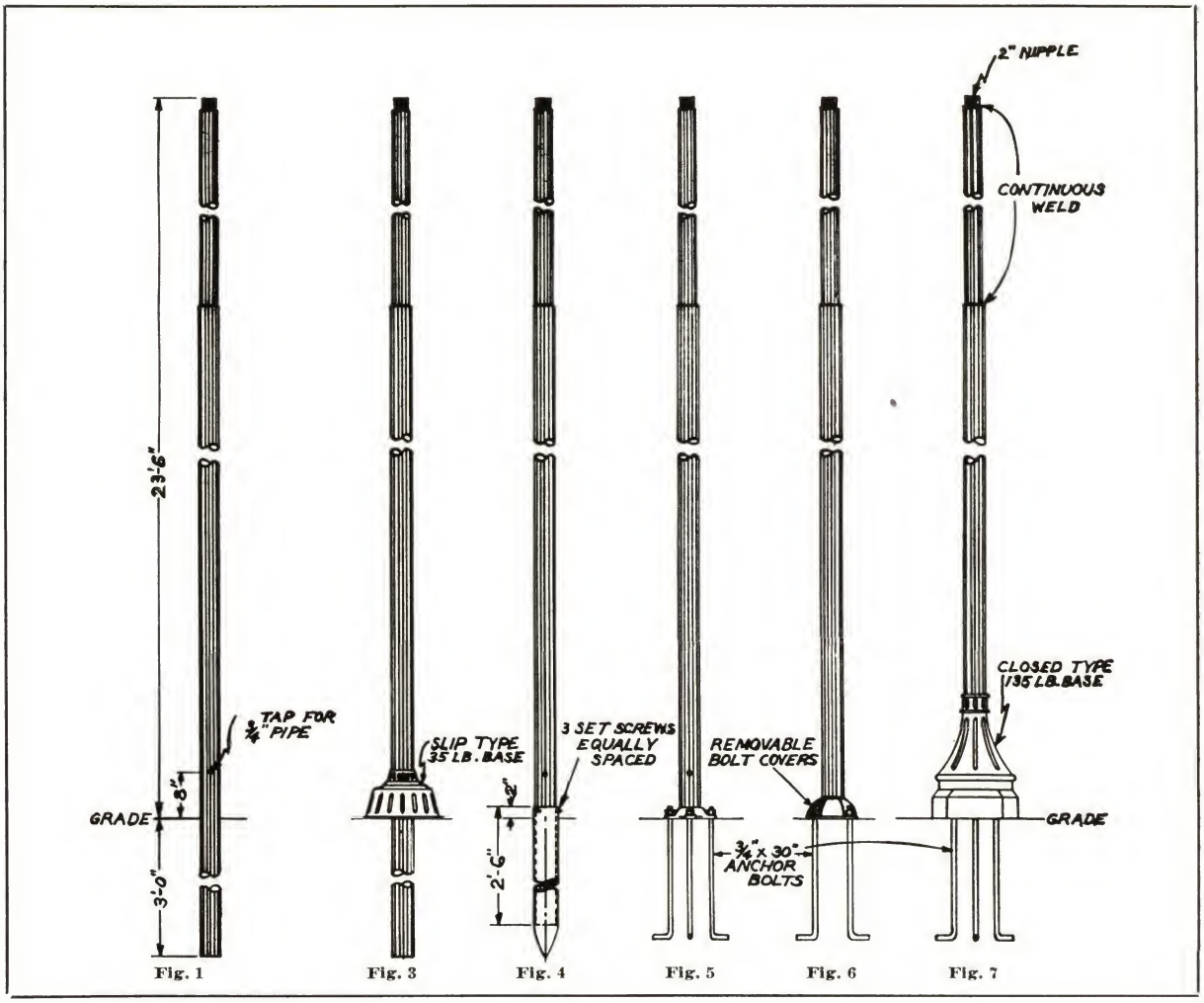
Cat. No.	Description	Wt. Lbs. Each	Price Each
1948	Standard only	241	**$229.96**
1948-A	Standard with Air	244	**236.09**
1948-W	Standard with Water	244	**237.00**
1948-AW	Standard with Air-Water	246	**239.77**
1948-R	Standard with Reel Well	336	**325.00**

With 2-Inch Pipe Stub

1949	Standard only	241	**231.19**
1949-A	Standard with Air	244	**237.32**
1949-W	Standard with Water	244	**238.23**
1949-AW	Standard with Air-Water	246	**241.00**
1949-R	Standard with Reel Well	337	**326.23**

REVERE FLOODLIGHTING POLES

Corrugated or Round Design—24 Foot Mounting Height—Two-Section Separable or One-Piece Welded Construction



These Revere Poles are in widespread use throughout the country and make very neat and practical installations, being available for various types of mounting as illustrated.

The "separable type" pole is constructed of 3½-inch O.D. corrugated or round pipe with a 2-inch pipe coupling welded in the tube. The upper section of the standard is 2-inch pipe, 6 feet long, threaded at both ends. The separable type facilitates handling and meets all low cost shipping requirements.

The "one-piece" welded pole is made of 3½-inch O.D. and 2⅞-inch corrugated or round pipe. A 2-inch pipe nipple is welded to the top to receive a one or two-lite bracket. All joints are continuous welded. This type of construction may be used where there are no restrictions on handling and shipping of long poles.

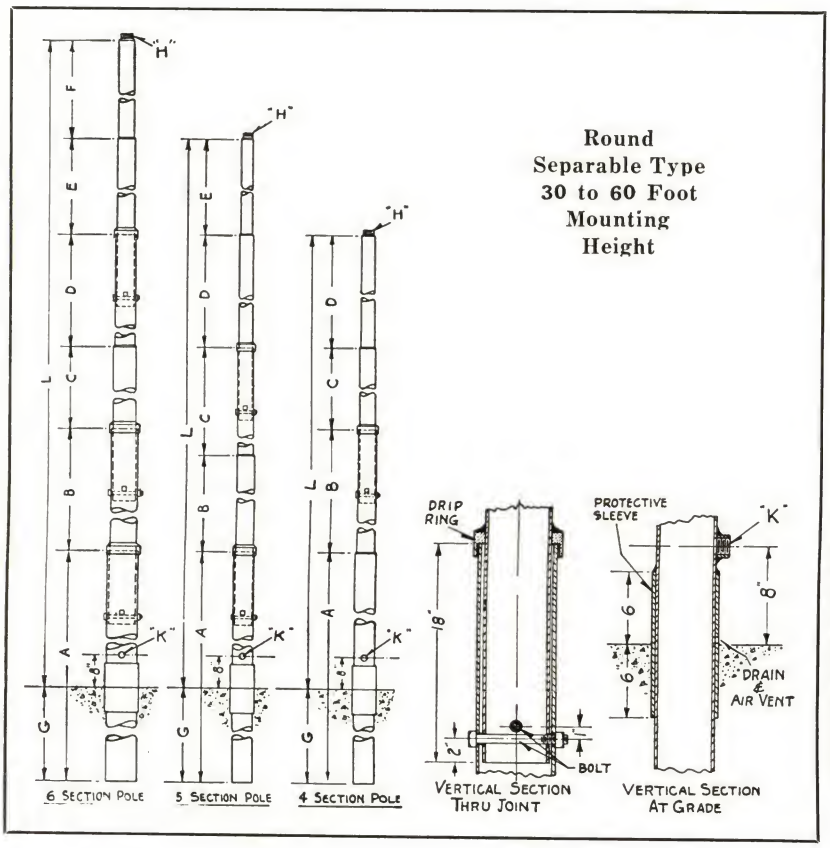
All poles are finished with one coat of priming paint. Brackets for floodlight mounting are not included with the poles, and must be ordered separately.

Capacity One or Two Floodlights

Corrugated			
Separable Type	One-Piece Type	Fig.	Approx. Wt. Lbs.
115-BCS	115-BC	6	127
115-1CS	115-1C	1	131
115-2CS	115-2C	4	151
115-3CS	115-3C	7	250
115-4CS	115-4C	3	166
115-8CS	115-8C	5	120
Round Type			
115-BRS	115-BR	6	112
115-1RS	115-1R	1	115
115-2RS	115-2R	4	130
115-3RS	115-3R	7	232
115-4RS	115-4R	3	145
115-8RS	115-8R	5	102

Prices on application.

REVERE RIGID FLOODLIGHT POLES



There is a Revere Rigid Floodlight Pole for every Industrial, Commercial and Sports-lighting application, for loads up to five to nine floodlights in a range of mounting heights from 30 to 60 feet. Poles of greater capacity and greater length are available on special order.

All long Rigid Poles are constructed of standard pipe and are made in separable pieces to facilitate handling and shipping, all pieces being less than 22 feet. All separable joints are furnished with a drip-ring to close the joint and to carry the load. Cross bolts are provided at each separable joint to make it rattle proof. All other joints are continuous welded. A protective sleeve is provided at the grade line to give added strength at a point where rusting is likely to occur. A vent is provided at the grade line so that there will be free passage of air in the pole to prevent condensation. The top of the pole is provided with a short threaded nipple, of the size shown in the table to receive any of the brackets listed on another page.

All Poles are finished with one coat of priming paint. Insert sleeve mounting may be used with these Poles. Prices and details will be furnished on request.

Brackets for floodlight mounting are not included in the listings and should be ordered separately.

SPECIFICATIONS

Catalog No.	(L) Mounting Height Ft.	Maximum Capacity Floods	No. Pieces	SIZE PIPE AND LENGTH OF SECTION												G	H	K	Wgt. Lbs.
				A		B		C		D		E		F					
				Size	Lgth.	Size	Lgth.	Size	Lgth.	Size	Lgth.	Size	Lgth.	Size	Lgth.	Lgth.	Pipe Thread	Pipe Thread	
115-30-2S	30	2	2	4"	16'	3.5"	6'6"	3"	6'6"	2.5"	6'0"					5'0"	2"	¾"	304
115-30-3S	30	3	2	4.5"	16'	4"	6'6"	3.5"	6'6"	3"	6'0"					5'0"	2"	¾"	388
115-30-5S	30	5	2	5"	16'	4.5"	6'6"	4"	6'6"	3.5"	6'0"					5'0"	3"	1"	455
115-35-2S	35	2	3	4"	15'	3.5"	9'6"	3"	8'6"	2.5"	7'0"					5'0"	2"	¾"	369
115-35-3S	35	3	3	4.5"	15'	4"	9'6"	3½"	8'6"	3"	7'0"					5'0"	2"	¾"	432
115-35-5S	35	5	3	5"	15'	4.5"	9'6"	4"	8'6"	3.5"	7'0"					5'0"	3"	1"	525
115-40-2S	40		3	4.5"	17'	4"	10'6"	3.5"	9'6"	3"	8'0"					5'0"	2"	¾"	495
115-40-4S	40	4	3	6"	17'	5"	10'6"	4.5"	9'6"	4"	8'0"					5'0"	3"	1"	715
115-40-6S	40	6	3	7"	17'	6"	10'6"	5"	9'6"	4.5"	8'0"					5'0"	3"	1"	810
115-40-9S	40		3	8"	17'	7"	10'6"	6"	9'6"	5"	8'0"					5'0"	3"	1¼"	1029
115-45-2S	45	2	3	4.5"	15'	4"	10'0"	3.5"	9'6"	3"	8'6"	2.5"	7'0"			5'0"	2"	¾"	508
115-45-3S	45	3	3	6"	15'	5"	10'0"	4.5"	9'6"	4"	8'6"	3.5"	7'0"			5'0"	3"	1"	752
115-45-7S	45	7	3	7"	15'	6"	10'0"	5"	9'6"	4.5"	8'6"	4"	7'0"			5'0"	3"	1¼"	927
115-50-2S	50	2	4	5"	17'	4.5"	14'0"	4"	11'0"	3.5"	8'0"	3"	6'0"			6'0"	2"	¾"	705
115-50-4S	50	4	4	6"	17'	5"	14'0"	4.5"	11'0"	4"	8'0"	3.5"	6'0"			6'0"	3"	1"	890
115-50-6S	50	6	4	7"	17'	6"	14'0"	5"	11'0"	4.5"	8'0"	4"	6'0"			6'0"	3"	1"	1058
115-50-8S	50	8	4	8"	17'	7"	14'0"	6"	11'0"	5"	8'0"	4.5"	6'0"			6'0"	3"	1¼"	1306
115-55-6S	55	6	4	7"	19'	6"	16'0"	5"	8'0"	4.5"	7'0"	4"	6'0"	3.5"	5'0"	6'0"	3"	1"	1226
115-55-9S	55	9	4	8"	19'	7"	16'0"	6"	8'0"	5"	7'0"	4.5"	6'0"	4"	5'0"	6'0"	3"	1¼"	1671
115-60-5S	60	5	4	7"	20'	6"	17'0"	5"	9'0"	4.5"	8'0"	4"	7'0"	3.5"	6'0"	7'0"	3"	1"	1254
115-60-7S	60	7	4	8"	20'	7"	17'0"	6"	9'0"	5"	8'0"	4.5"	7'0"	4"	6'0"	7'0"	3"	1¼"	1515
115-60-9S	60	9	4	9"	20'	8"	17'0"	7"	9'0"	6"	8'0"	5"	7'0"	4.5"	6'0"	7'0"	3"	1¼"	1780

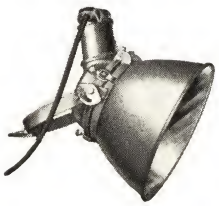
Be sure to order the proper Floodlight Brackets for your poles, see following page for illustrations and descriptions.
Base and Bolt Type Mounting available. Price on application.

CROUSE-HINDS GENERAL PURPOSE FLOODLIGHTS

The FLA and MUA line of general purpose floodlights were designed for lighting athletic fields of all types, parking areas, playgrounds, outdoor storage areas and service stations, suitable for 750, 1000 or 1500 watt, PS-52 bulb lamps. Can be arranged for 500 watt lamp if specified. Aluminum reflectors are Alzak finished. The FLA line has a tempered glass cover and is relamped through the hinged rear door.

The MUA line has two models of heads and eight different reflectors. Model II heads are especially suitable for athletic field installations. Aluminum reflectors available with, or without, hinged front door.

TYPE FLA



The type FLA floodlight was developed primarily for athletic field lighting. Because of its versatility, it is suitable for many general floodlighting applications.

The FLA floodlight can be furnished with four types of reflectors all with Alzak finish. A heat and impact resisting cover glass is sealed into the reflector.

A large hinged rear door makes relamping easy. A catch holds the door open.

Degree scales and a sight for aiming the floodlight beam at a predetermined spot on the area to be illuminated is included.

Floodight Complete with FL1585 Cross-Arm Base for Wood Arm*

Reflector Description	Diameter Inches	Cat. No.	List Each
80 Degree—Etched Alzak	18	44429B	$48.00
50 Degree—Etched Alzak	18	44428B	48.00
35 Degree—Polished Alzak	18	44427B	51.00
20 Degree—Polished Alzak	20	44426B	60.00

Accessories and Parts for Type FLA

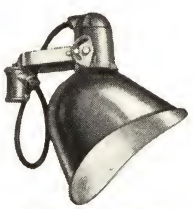
Description	Cat. No.	List, Each When Purchased Separately	List, Each Add'al When Purchased With Floodlight
Cross-Arm Base			
For Wood Arms	FL1585	$1.50	No Extra
For Steel Arms	FL1824	1.50	No Extra
For Steel or Wood Arms	FL2019	1.50	No Extra
Slip-Fitter Base			
For 1½-inch Pipe	KL397	2.00	$2.00
For 2-inch Pipe	KL3631	2.00	2.00
For 2½-inch Pipe	KL3055	2.00	2.00
Bracket Base	KL2076	1.00	1.00
Lamp Receptacle	HL5298	1.50	No Extra

*To obtain other bases on FLA, specify "FLA No. ..... except with ..... base."

TYPE MUA ELLIPTALUX WITH PORCELAIN ENAMELED REFLECTORS—Model II Head

Wide beam auxiliary reflector is sheet aluminum with etched Alzak finish. Superimposes on the general distribution of a wide beam of high intensity for lighting distant areas.

Narrow beam auxiliary reflector is sheet aluminum with polished Alzak finish. Supplies a narrow beam of high intensity having a spread of 40° horizontally by 27° vertically.



With Slip Fitter Mounting

*With Slip-Fitter Bracket Cat. No.	List Each	With Cross-Arm Bracket Cat. No.	List Each	With Angle Bracket Cat. No.	List Each
Without Auxiliary Reflector					
44218	$19.00	44219	$17.00	44220	$18.00
With Wide Beam Auxiliary Reflector					
44221	22.00	44222	20.00	44223	21.00
With Narrow Beam Auxiliary Reflector					
44224	25.00	44225	23.00	44226	24.00

Note: Model I head will be furnished at the same price when specified.

TYPE MUA ALUMALUX WITH ALUMINUM REFLECTOR—Model II Head



Cross Arm Mounting with Model II Head

Mounting provides both horizontal and vertical degree scales for accurate setting of the floodlight during installation. Special cross arm bracket for steel tower mounting, using two bolts, can be furnished without additional charge if specified.

Furnished wired complete with two single conductors of rubber-covered service wire, 4 feet long, or 4 feet of 2-conductor cable. Either open style or with enclosing lens. Hinged door and lens recommended for keeping the reflcting surface free from dirt and dust, and preventing lamp breakages. Standard lens is plain; a stippled lens will be furnished if desired.

With Medium Beam Etched Alzak 18-Inch Reflector

Description	Without Hinged Door Cat. No.	Without Hinged Door List Each	With Hinged Door Cat. No.	With Hinged Door List Each
1½-Inch Slip Fitter	43911	$31.00	43953	$46.00
Cross Arm	43909	29.00	43951	44.00
Pole Bracket	43917	30.00	43959	45.00

With Narrow Beam Polished Alzak 18-Inch Reflector

1½-Inch Slip Fitter	43912	$38.00	43954	$53.00
Cross Arm	43910	36.00	43952	51.00
Pole Bracket	43918	37.00	43960	52.00

Head and Support Complete Without Alzak Reflector

Cat. No.		List Each
43507	1½-Inch Slip Fitter Mounting	$11.00
43506	Cross Arm	9.00
43510	Bracket Mounting	10.00

Reflector and Hinged Door Complete Without Head and Support

44152	Medium Beam Reflector, Clear Lens	$35.00
44153	Narrow Beam Reflector, Clear Lens	42.00

Note: Model I Head will be furnished at same price when specified.

TYPE MUA MULTALUX WITH PORCELAIN ENAMELED REFLECTOR—Model I Head

Designed for lighting service stations. Interchangeable.

Wide beam auxiliary reflector is sheet aluminum with etched Alzak finish. Super imposes on the general distribution a wide beam of high intensity for lighting buildings and pumps.



With Slip Fitter Mounting

Narrow beam auxiliary reflector is sheet aluminum with polished Alzak finish.

Cat. No.	Without Auxiliary Reflector Description	List Each
42206	1½-Inch Slip Fitter	$30.00
42207	Cross Arm	28.00
42208	Pole Bracket	29.00
42387	Pendent Mounting	26.00
	With Wide Beam Etched Alzak Auxiliary Reflector	
42209	1½-Inch Slip Fitter	$33.00
42210	Cross Arm	31.00
42211	Pole Bracket	32.00
42388	Pendent Mounting	29.00
	With Narrow Beam Polished Alzak Auxiliary Reflector	
42212	1½-Inch Slip Fitter	$36.00
42213	Cross Arm	34.00
42214	Pole Bracket	35.00
42389	Pendent Mounting	32.00

Note: Model II Head will be furnished at same price when specified.

Schedule "F"—Prices Do Not Include Lamps

CROUSE-HINDS GENERAL PURPOSE FLOODLIGHTS

TYPES MDB-8 AND MDB-10

8-Inch, 100 Watts **10-Inch, 200 Watts**



Std. Mounting

Lightweight, weatherproof; for lighting residential yards, driveways.

Round flange base can be bolted to flat horizontal or vertical surface. Holes are spaced to fit holes in a 4-inch outlet box. Steel stake can be provided for temporary mounting on ground. Suspension mounting furnished without additional charge. Green enamel finish.

When furnished with polished Alzak reflector, units become spotlights.

Shipping weight: Type MDB-8, 7½ pounds; Type MDB-10, 9 pounds.

*With Wide Beam Etched Alum. Reflector				With Narrow Beam Polished Alzak Reflector				
Type MDB-8		Type MDB-10		Type MDB-8		Type MDB-10		
100 W.		200 W.		100 W.		200 W.		Color
Cat. No.	List Each	Cat. No.	List Each	Cat. No.	List Each	Cat. No.	List Each	of Lens
42403	$8.00	42405	$12.50	42409	$ 9.50	42411	$14.50	Clear
42434	12.80	42438	19.00	42442	14.30	42446	21.00	Red
42435	12.80	42439	19.00	42443	14.30	42447	21.00	Amber
42436	12.80	42440	19.00	42444	14.30	42448	21.00	Green
42437	12.80	42441	19.00	42445	14.30	42449	21.00	Blue

*When furnished in etched Alzak finish, Type MDB-8, add $1.50; Type MDB-10, $2.00.

When furnished without lens or clamping ring, Type MDB-8, deduct $2.00; Type MDB-10, deduct $4.00.

TYPE MDR-14 PORTABLE



Type MDR-14 is a light duty floodlight especially suitable for emergency portable lighting as a narrow beam spotlight for long range, or as a wide beam floodlight for medium or short range use.

Net weight: 17¼ lbs. Shipping weight: 25 lbs.

Lens	Lamp Watts	Lamp Bulb	Cat. No.	List Each
Wide Beam, Short Range				
Diffusing	500	PS-40	**44637**	**$48.00**
Narrow Beam, Long Range				
Plain	500	PS-40	**44636**	**48.00**

KL9454 set of holding clamps, list price per set **$9.00**, can be used with this floodlight. See ADR-12 and ADR-14 for further information.

Heavy duty portable floodlights with cast aluminum housing can be furnished. See listings of types ADR-12 and ADR-14.

TYPES MDB-14 AND MDB-16 FLOODLIGHTS

14-Inch, 500-Watt



Type MDB-16
With Slip-Fitter Mounting



Type MDB-14
With Cross-Arm Mounting and Light Duty Hinged Door

16-Inch, 1000-Watt



Type MDB-16
With Flat Base and Heavy Duty Hinged Door

Floodlight Complete with Cross Arm Mounting*

Type	Reflector	Without Cover Glass Cat. No.	Without Cover Glass List Each	With Light Duty Door and Cover Glass Cat. No.	With Light Duty Door and Cover Glass List Each	With Heavy Duty Door and Cover Glass Cat. No.	With Heavy Duty Door and Cover Glass List Each
MDB-14	70°—Etched Alzak	**44160**	**$19.00**	**44597**	**$30.00**	**43565**	**$33.00**
	20°—Polished Alzak	**44161**	**24.00**	**44598**	**35.00**	**43566**	**38.00**
MDB-16	70°—Etched Alzak	**44169**	**22.00**	**44595**	**34.00**	**43673**	**40.00**
	20°—Polished Alzak	**44170**	**28.00**	**44596**	**40.00**	**43674**	**46.00**

*To obtain other bases, specify "MDB-..... except with ..... base."

MOUNTING BASES AND BRACKETS

KL397 slip fitter base for 1½-inch pipe.....add **$2.00** list
KL3631 slip fitter base for 2-inch pipe.....add **2.00** list
KL3055 slip fitter base for 2½-inch pipe.....add **2.00** list
KL3070 U-bolt base for 1-inch to 2-inch pipe.....add **2.00** list
KL8844 pole bracket.....add **1.00** list
KL2804 flat base.....add **2.00** list

Schedule "F"—Prices Do Not Include Lamps

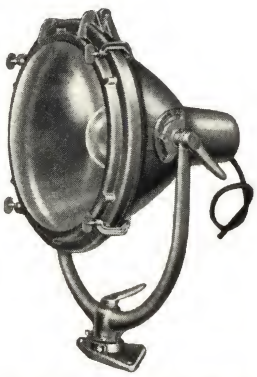
CROUSE-HINDS HEAVY DUTY FLOODLIGHTS

TYPES ADE-12, ADE-14, AND ADE-16

Medium and Long Range



Type ADE-12 with Standard Mounting



Type ADE-14 and ADE-16, With Standard Mounting

A clear, plain lens is furnished unless otherwise specified. A clear, diffusing lens, smooth beam lens and two types of spread lens, 50° and 100°, can be furnished without additional charge, if specified on the order.

Heavy duty housings made of cast aluminum.

Reflectors are Polished Alzak Aluminum

Type ADE-12

Cat. No.	Price Each	Description	Lamp Watts	Lamp Bulb
42428A	$43.00	With Wide Beam Reflector....	200	PS-30
42429A	43.00	With Narrow Beam Reflector	250	G-30
44492	43.00	With Narrow Beam Reflector	250	G-30

Type ADE-14

42740	68.00	With Wide Beam Reflector....	500	PS-40
42739	68.00	With Narrow Beam Reflector	500	PS-40
42921A	68.00	With Narrow Beam Reflector	500	G-40

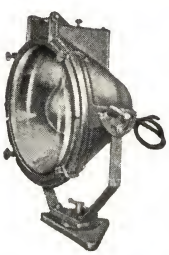
Type ADE-16

42741	85.00	With Wide Beam Reflector....	1000	PS-52
42932	85.00	With Narrow Beam Reflector	1000	PS-52
42743A	85.00	With Narrow Beam Reflector	1000	G-40

Available with Slip Fitter for 1¼-inch pipe at same price.

TYPE LCE-1120 FLOODLIGHT PROJECTORS

Medium and Long Range



Used for the illumination of large areas.

The unit can be arranged with plain, spread or diffusing lens.

The 750, 1000, or 1500-watt, PS-52 bulb lamp; or the 1000 or 1500-watt, G-bulb lamp, may be used as required.

When used with the G-bulb lamp, the housing is tipped over so that the lamp operates in a base-down position.

Finish: case, natural aluminum; base and trunnion, galvanized.

Shipping weight, 115 pounds.

Cat. No.	List Each	Description	Lamp Watts	Lamp Bulb
42745	$140.00	With Wide Beam Polished Alzak 20-Inch Reflector	750 to 1500	PS-52
42746	140.00	With Narrow Beam Polished Alzak 20-Inch Reflector	1000 or 1500	G-48
42953	140.00	With Narrow Beam Polished Alzak 20-Inch Reflector	750 to 1500	PS-52

TYPES ADR-12 AND ADR-14 PORTABLE



Type ADR-12 With Holding Clamps



Type ADR-14 with Cable Assembly Connected

Types ADR-12 and ADR-14 floodlights are rugged units especially adaptable for portable use, either when a narrow beam spotlight or a wide evenly distributed beam of light is required.

Housings: Cast aluminum alloy, dust-tight, non-ventilated, and weatherproof.

Wiring Connections and Cable: Built-in weatherproof twistlock plug at rear of housing has spring door with gasket. No external cable is included with floodlights.

With Polished Alzak Reflector

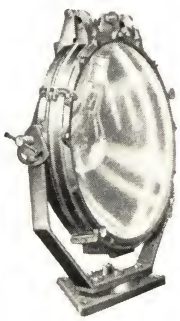
Type	Lens*	Lamp Watts	Lamp Bulb	Cat. No.	List Each
ADR-12	Diffusing	250	G-30	42950C	$50.00
ADR-12	Plain	250	G-30	42023C	50.00
ADR-14	Diffusing	500	G-40	44176C	71.00
ADR-14	Plain	500	G-40	42783C	71.00

Cable Assembly

With 25 ft. of No. 14, 2-conductor portable cable	KL9138	$10.00
With 50 ft. of No. 14, 2-conductor portable cable	KL9139	17.00
With 100 ft. of No. 14, 2-conductor portable cable	KL9140	31.00

*Diffusing lens provides wide beam, and plain lens provides narrow spotlight beam.

TYPE LCE-24



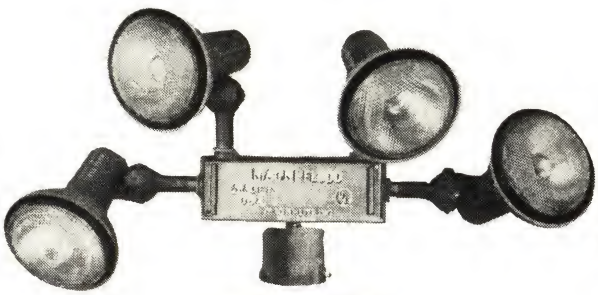
Type LCE-24 floodlight projector is designed to utilize the maximum amount of the light of the lamp and this increase in efficiency allows large areas to be lighted with a smaller number of projectors, with a corresponding decrease in installation cost, lighting load, and maintenance costs. Unless otherwise specified, the projector is equipped with a clear, plain lens. However, a clear, spread lens which produces an elliptical beam of light can be furnished without additional charge, if specified on the order.

With Narrow Beam Polished Alzak Reflector

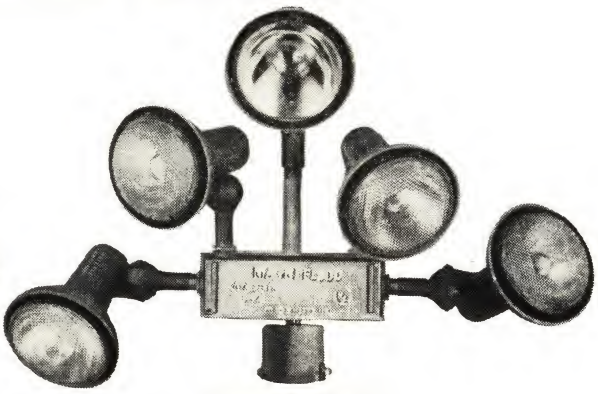
Lamp Watts	Lamp Bulb	Cat. No.	List Each
1500 or 2000	PS-52	42781A	$190.00
1500	G-48	42841A	190.00

Schedule "F"—Prices Do Not Include Lamps

MAGNI-LITE WEATHER-PROOF FLOODLIGHTS



Catalog No. 4RTS

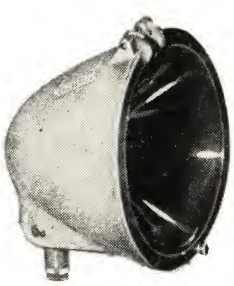


Catalog No. 5RTES

Cat. No.	Description	Wt. Lbs. Each	Price Each
	Magni Flood Regular Lamp Holder Assemblies For PAR 38 75w and 150w		
2RT	2 Lamp Holders with wiring trough	4¾	$12.20
3RT	3 Lamp Holders with wiring trough	6½	15.70
4RT	4 Lamp Holders with wiring trough	8¼	19.20
5RTE	6 Lamp Holders with wiring trough with 1 extension	10¼	23.25
6RT	6 Lamp Holders with wiring trough	11¾	26.20
7RTE	7 Lamp Holders with wiring trough with 1 extension	13¾	30.25
8RTE	8 Lamp Holders with wiring trough with 1 extension	15½	33.75
	Magni Flood Mogul Lamp Holder Assemblies For R40 300w and 500w		
2MT	2 Lamp Holders with wiring trough	5¼	20.40
3MT	3 Lamp Holders with wiring trough	7¼	28.00
4MT	4 Lamp Holders with wiring trough	9¼	35.60
5MTE	5 Lamp Holders with wiring trough with 1 extension	11½	43.75
6MT	6 Lamp Holders with wiring trough	13¼	50.80
7MTE	7 Lamp Holders with wiring trough with 1 extension	15½	58.95
8MTE	8 Lamp Holders with wiring trough with 1 extension	17½	66.55
	Magni Flood Side Prong Lamp Holder Assemblies For PAR 46 200w		
2JT	2 Lamp Holders with wiring trough	6¾	29.20
3JT	3 Lamp Holders with wiring trough	9½	41.20
4JT	4 Lamp Holders with wiring trough	12¼	53.20
5JTE	5 Lamp Holders with wiring trough with 1 extension	15¼	65.75
6JT	6 Lamp Holders with wiring trough	17¾	77.20
7JTE	7 Lamp Holders with wiring trough with 1 extension	20¾	89.75
	Magni Flood Back Prong Lamp Holder Assemblies For PAR 56 300w		
2LT	2 Lamp Holders with wiring trough	7¼	34.20
3LT	3 Lamp Holders with wiring trough	10¼	48.70

MAGNI FLOOD

The Spotlights on Magni-Lites' Brilliant 100,000 Beam Candlepower Floodlight



No. L

This outdoor No. L spotlight uses the efficient Seal Beam PAR 56, 300-watt G.E. lamp. It has been designed so that the lamp is supported by the rim, the end prong type socket (G.E. No. 95x987) is used as a connection only. The lamp seats and rests on positioning lugs with a hinged rim supplying necessary holding pressure against the rim of the lamp.

The weather-proof spot light is made of cast silicon aluminum, with enclosed 20-inch long wire leads. The light weight unit (4½ lbs. with lamp) can be mounted singly on the Magni-flood Adaptor box, in groups of 2 on the wiring box and 3 on the wiring trough. The light is completely flexible on a horizontal or vertical plane.

Catalog No. L spot light is also available for the PAR 46 200-watt Seal Beam lamp. This light is No. J and provides approximately 50,000 beam candle power.

Cat. No.	Description	Std. Pkg.	Wt. Lb. Each	Price Each
L	Back Prong Socket Lamp Holder (PAR 56 300w)	12	3	$14.50
J	Side Prong Socket Lamp Holder (PAR 46 200w)	12	2¾	12.00



No. J

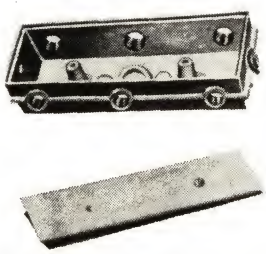
MAGNI-LITE WEATHER-PROOF FLOOD LIGHTING



Cat. No.	Description	Packed In Box	Std. Pkg.	Wt. Lbs. Each	Price Each
R	Lamp holder cast silicon aluminum, weather proof heat resisting seal. Medium base porcelain socket. Enclosed wiring 18 inches No. 16 stranded wire leads. Swivel joint, ½-inch NPS thread and locknut. To be used with PAR38 75 and 150 watt lamps. May also be used with R40 150, 200 and 300 watt lamps	2	24	1¾	$3.50



M	Lamp holder cast silicon aluminum weather proof heat resisting seal. Mogul base porcelain socket. Enclosed wiring 18 inches No. 14 stranded wire leads. Swivel joint, ½-inch NPS thread and locknut. To be used with R40 Mogul base 300 and 500 watt lamps.....	6	12	2	7.60



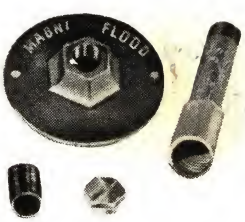
T	Wiring trough cast silicon aluminum weather proof side cover plate. Permits simple assembly of 1 to 8 lamp holders. Tapped ½-inch NPS thread. Easily mounted at base or side outlet, also permits flush mounting to wall or pole crossarm, complete with 2 (No. P) aluminum plugs and cover plate gasket.....	1	18	1¼	5.20
TX	Same as above with the 9th hole in back of trough tapped ½-inch NPS. Permits bringing leads through back of trough as well as adding another fixture	1	18	1¼	5.30



S	Slip fitter cast silicon aluminum for use with 1½ or 2-inch pipe assembly, includes set screws and one (No. N) nipple.....	12	12	½	2.20



B	Wiring box, 4 inches diameter, 6 holes ½-inch NPS, 2 plugs with cover. Complete with gasket and close up plugs, ½-inch NPS standard pipe thread.....	1	24	1	2.80
BX	Same as Cat. No. B with 7th hole in back of box tapped ½-inch NPS.....	1	24	1	2.90
BC	Same as Cat. No. B except cast cover (Cat. No. C with ½-inch NPS tapped hole) substituted for flat cover plate.....	1	24	1	3.00



C	Cover plate cast silicon aluminum for use with one (No. D, R or M) lamp holder tapped ½-inch standard pipe thread.....	24	24	¼	.60
N	A ½-inch NPS thread 4-inch nipple for use in connecting trough in raceways.....	12	12	¼	.39
P	Precision made aluminum close up plug with ½-inch NPS thread for use in trough or wiring box to make weather proof seal for outlets not in use.....	100	100	.....	.165
E	Extension for elevating lamp holders consists of one ½ x 6 inch nipple and one ½-inch coupling all threaded standard pipe thread.....	12	12	¼	.55

MAGNI-LITE WEATHER-PROOF FLOODLIGHTS

STOCK ASSEMBLIES



No. D



No. A

Magni Flood lamp holders weather proofs the fixture at the base of the lamp immediately above the socket. This weather proofs all lamps regardless of varying lengths. No mechanical gadgets or springs are required to compensate for the varying overall length of the lamps.

A cooler lamp operation is provided by the Magni Flood method of weather proofing. A cooler lamp means increased lamp life. Positive center prong contact provided by Magni Flood method of weather proofing eliminates high voltage arcing.

Insulation of socket and wire from heat is provided by the Magni Flood method of weather proofing. Thereby eliminating fusion of socket shell and lamp base. Such fusion results in socket breakage.

No. K—All Weather Utility Light. Requires no installation. Lampholder with 6 feet of SJT cord and rubber plug on 8-inch spike. For ground, wall, barn or post mounting. Available with 10 feet or 25 feet SJT cord.

No. RCL—Weatherproof All-purpose Light, Requires no installation. Completely protects the side of lamp and eliminates stray light. Regular lamp holder with 6 feet of SJT cord and rubber plug on 4-inch cover plate. Medium base socket for PAR 38 or R 40 lamp. Mounting on side wall, barn, trees or garage. Available with 10 feet or 25 feet SJT cord.

No. DCL—Outdoor Utility Lamp. Utility holder with 6 ft. SJT cord and rubber plug on 4-inch cover plate. Mounting on side wall, barn, trees or garage. Use where stray light is not objectionable or lamp does not require protection of side. Available with 10 feet or 25 feet SJT cord.

No. D—Utility Lamp Holder for cluster mounting on wiring trough, wiring box or adaptor wiring box. Enclosed 18 inches of TFF plastic No. 16 stranded copper wire.

No. A—Adaptor Wiring Box. 2½ inches square. 4 openings tapped ½-inch NPS—Hold 1-3 Magni Flood lamp holders with slip fitter or conduit. Furnished with 1 plug—cover and weather tight gasket.

No. AX—Same as Cat. No. A, with fifth hole in back of box tapped ½-inch NPS.

Cat. No.	Description	Per Box	Std. Pkg.	Price Each
K	Utility Lamp Holder on 8-inch spike with 6 ft. extension	6	36	$3.58
RC	Regular Lamp Holder on 4-inch cover plate	2	24	4.10
RCL	Regular Lamp Holder on 4-inch cover plate, 6 ft. extension	2	24	5.20
DCL	Utility Lamp Holder on 4-inch cover plate, 6 ft. extension	6	36	4.00
D	Med. Socket Utility Lamp Holder (PAR 38 75w-150w	6	36	2.30
A	Adaptor Wiring Box 2½ in. sq.	4	24	2.30
AX	Adaptor Wiring Box 2½ in. sq.	4	24	2.40
CL	Glare Shield for Cat. No. L			3.00
GJ	Glare Shield for Cat. No. J			2.75
GR	Glare shield for Cat. No. R & M			2.50
W	Wire Guard for Cat. No. R & M. Heavy gauge steel wire, cadmium plated. Easily attached to fixture			2.00

STEBER REFLECTORS

DEEP BOWL UNITS





For 2¼-Inch Shadeholder

Cat. No.	Diam. In.	Lamp Watts	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
		Graytone Ultranamel Finish			
1057	7½	60-100	10	7	$1.55
1059	10½	150-300	10	12	1.95
		Rich Green Porcelain Enamel			
1157	7½	60-100	10	8	2.25
1159	10½	150-300	10	14	3.30

Lokfast Detachable Socket Type for ½-Inch Conduit Mounting

		Graytone Ultranamel Finish			
2057	7½	60-100	10	11	2.75
2059	10½	150-300	10	15	3.10
		Rich Green Porcelain Enamel			
2157	7½	60-100	10	13	3.90
2159	10½	150-300	10	18	4.45

SOCKET ATTACHMENT UNITS

For direct attachment to sockets. RWP types have improved rigid shadeholder welded to reflector. Holds reflector firmly in position. Fits weatherproof, composition, and porcelain sockets, also porcelain receptacles, without separate shadeholders.



One-Piece Shadeholder Attached Shallow Dome

Graytone Ultranamel Finish

Cat. No.	Diam. In.	Lamp Watts	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
RWP-10	10	60	10	5	$0.90
RWP-12	12	100	10	9	1.05
RWP-14	14	150	10	13½	1.35
RWP-16	16	200	10	17½	1.75

Standard Dome

Graytone Ultranamel Finish

RWP-412	12	100	10	12½	1.75
RWP-414	14	150	10	17	2.00
RWP-416	16	200	5	11½	2.40

STEBER REFLECTORS

Graytone Ultranamel—Rich Green Porcelain Enamel

Graytone Ultranamel — a baked-on synthetic enamel — tough, durable, and weatherproof — originated and used exclusively by Steber for finishing reflectors, coverlites, yardlights and floodlights. Withstands bending, dropping, and hard usage, yet has rich lustrous gray tone, somewhat like hammered silver.

Rich Green Porcelain Enamel — Finest quality vitreous enamel, rich in tone, neutral in color, assures years of satisfactory service and maintained efficiency.

FOR 2¼-INCH SHADEHOLDER



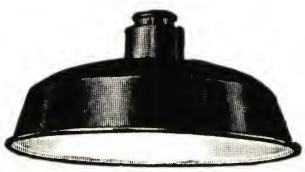
Shallow Dome

Shallow Dome

Graytone Ultranamel Cat. No.	Pkg. Wt. Lbs.	Price Each	Diam.	Watts	Std. Pkg.	Rich Green Porcelain Enamel Cat. No.	Pkg. Wt. Lbs.	Price Each
610	5	$0.80	10	25– 60	10	710	7½	$1.26
612	8	.95	12	75–100	10	712	11	1.50
614	11	1.25	14	150	10	714	15	2.00
616	16	1.65	16	200	10	716	18	2.50

Standard Dome

812	10	1.65	12	75–100	10	912	15	2.60
814	19	1.90	14	150	10	914	25	3.10
816	21	2.30	16	200	10	916	32	3.60



Standard Dome

LOKFAST TYPE FOR ½-INCH CONDUIT MOUNTING

Listed by Underwriters' Laboratories, Inc.

Easily removable type reflectors; one-piece cast aluminum socket hood for ½-inch vertical or horizontal conduit mounting; designed for easy installation and servicing; rotate one-quarter turn and reflector locks securely in hood; easily detached.



Shallow Dome

Shallow Dome

Graytone Ultranamel Cat. No.	Pkg. Wt. Lbs.	Price Each	Diam.	Watts	Std. Pkg.	Rich Green Porcelain Enamel Cat. No.	Pkg. Wt. Lbs.	Price Each
1212 V or H	16	$2.75	12	75–100	10	1312 V or H	18	$3.90
1214 V or H	20	2.95	14	150	10	1314 V or H	26	4.45
1216 V or H	12	3.30	16	200	5	1316 V or H	16	5.00
1218M V or H	20	5.40	18	*300–500	5	1318M V or H	33	7.25

Standard Dome

1412 V or H	18	3.10	12	75–100	10	1512 V or H	22	4.15
1414 V or H	24	3.50	14	150	10	1514 V or H	39	4.70
1416 V or H	11	3.85	16	200	5	1516 V or H	13	5.15
1418M V or H	24	6.00	18	*300–500	5	1518M V or H	28	7.75



Standard Dome

*Mogul Base Socket. 18" Shallow Dome and Standard Dome reflectors are furnished with separable threaded neck.

ANGLE REFLECTORS

For 2¼-inch Shadeholder



Graytone Ultranamel Cat. No.	Pkg. Wt. Lbs.	Price Each	Diam.	Watts	Std. Pkg.	Rich Green Porcelain Enamel Cat. No.	Pkg. Wt. Lbs.	Price Each
1008	6½	$1.50	8	60–100	10	1108	7½	$2.20
1010	13	2.00	10	150–200	10	1110	18	3.00

LOKFAST TYPE

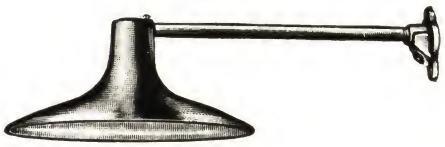
For ½-inch Conduit Mounting

2008 V or H	12	2.75	8	60–100	10	2108 V or H	17	3.40
2010 V or H	17	3.10	10	150–200	10	2110 V or H	20	3.90

STEBER YARDLIGHTS

No. HA-14 STURDILITE

Cast Aluminum Reflector—UL Listed



Reflector and neck die cast in one piece. Will withstand any wind or weather. 15-inch rigid pipe. Porcelain socket, completely wired with No. 18 standard wire. Four point mounting wall flange is cast and has ½-inch 2-pole insulating bushings. Individually packed. Graytone Ultranamel outside — white inside.

Cat. No.	Reflector Diameter	Lamp Watts	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
HA-14	14	150	1	3	13	**$6.30**

No. HA-15 STURDILITE



For installation not requiring the junction box fitting supplied with the HA-14 Sturdilite. This unit has all the outstanding features of the HA-14 except that it is furnished with a heavy duty conventional mounting flange for open wiring. Insulating bushings to protect entrance leads and Vibresist gasket for longer lamp life.

Cat. No.	Reflector Diameter	Lamp Watts	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
HA-15	14	150	1	3	13	**$6.00**

VP SERIES YARDLIGHT

Porcelain Enamel Reflectors



Reflector of high grade porcelain enamel, green finish. Underwriters approved; meets REA specifications. 15-inch rigid pipe arm. Cast hood and wall flange. Flange is provided with insulated bushings for open wiring. Completely wired with No. 18 stranded wire. Individually packed.

Cat. No.	Reflector Diameter	Lamp Watts	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
VP-12	12	100	1	5	17	**$4.95**
VP-14	14	150	1	5	20	**5.30**

STEBER YARDLIGHTS

RSU SERIES YARDLIGHT

With Ultranamel Reflector



Steel reflector bolts to socket head to afford rigid mounting. Keyhole slots in reflector allow quick and easy removal. Arm is ½-inch rigid pipe. Two point mounting cast wall flange. Wired with No. 18 stranded wire. Insulating bushings furnished for open wiring. Reflector finished in Graytone Ultranamel; white inside.

Cat. No.	Reflector Diameter	Lamp Watts	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
RSU-12	12	100	1	5	16	**$4.25**
RSU-14	14	150	1	5	18	**4.50**

GOOSENECK TYPE YARDLIGHT



Constructed of ½-inch thinwall conduit, ends swaged and threaded to ⅜-inch pipe size, heavy drawn steel flange for wall or 4-inch outlet box mounting, steel reflector in Graytone Ultranamel finish, complete with socket, wire and screws.

Cat. No.	Diam. Inches	Watts	Carton	Std. Pkg.	Pkg. Wt.	Price Each
BR-10	10	60	1	10	20	**$2.60**
BR-12	12	100	1	10	24	**2.85**
BR-14	14	150	1	10	28	**3.20**

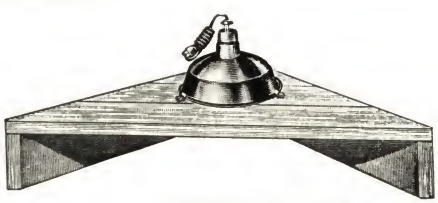
STEBER PIG BROODER HEAT REFLECTORS



PBU Heat Reflector

Highly efficient standard dome reflectors finished in Graytone Ultranamel and equipped with 6-ft. service cord and plug. Can be easily attached to hover with the use of screws or nails.

The hover can be obtained from almost any supplier of farm equipment, or can be built at very little cost according to specifications enclosed with each reflector.



Cat. No.	Watts	Reflector Size	Carton	Std. Pkg.	Pkg. Wt.	Price Each
PBU-1414	150-200	14	1	6	17	**$4.40**

STEBER STURDIFLEX

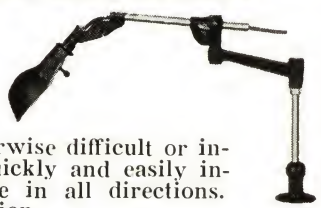
HEAVY DUTY INDUSTRIAL AND MACHINE LIGHTS

Sturdiflex units are designed for mounting directly to punch presses, lathes, milling machines, etc., and are also ideal for use in offices, drafting rooms, for all types of bench work, or wherever auxiliary lighting is desired to improve working conditions and speed production. Made in a wide variety of types for every application, each of which is equipped with attachment cord and plug. They may be instantly adjusted to any spot within their spherical radius. Dependable automatic tension and perfect balance keeps them firmly in position regardless of machine vibration.

Standard conduit tubing used may be replaced by any desired length of tubing for special installation. This requires only a minimum of time and provides a lighting unit tailored to fit the job.

HEAVY DUTY LONG SPHERICAL RADIUS LIGHTS

Nos. ABL-1, ABL-2, ABL-3 and ABL-4



These "Sturdiflex" units are designed especially for use where a long spherical radius is needed in order to spot the light at otherwise difficult or inaccessible points. Quickly and easily installed and adjustable in all directions. Heavy duty construction.

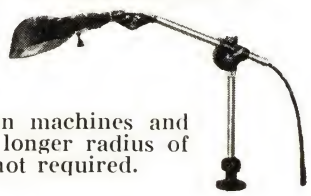
POPULAR UTILITY MACHINE LIGHTS

Nos. ABL-5, ABL-6, ABL-7 and ABL-8

"Sturdiflex" units in this group are similar to ABL-9 to ABL-12 types except for the omission of the upright extension arm. Can be converted at any time by the addition of upright extension.

GENERAL PURPOSE MACHINE LIGHTS

Nos. ABL-9, ABL-10, ABL-11 and ABL-12



Similar in construction to Heavy Duty types listed above but without center extension arm. Ideal for use on machines and equipment where the longer radius of Heavy Duty types is not required.

SPECIAL PURPOSE INDUSTRIAL LIGHTS

Nos. ABL-13 and ABL-14



Super-flexibility in these two units assured by the addition of an extra swivel. Designed to answer the lighting problems encountered with larger presses, milling machines, etc.

FLUORESCENT LIGHTING UNIT No. ABL-220

For inspection, jewelers, engravers, toolmakers and similar close work requirements, No. ABL-220 provides shadowless localized lighting with greater visual accuracy. Fixture arms are similar to ABL-9 with fluorescent troff in place of incandescent lamp reflector. Fixture will accommodate two 20 watt fluorescent lamps. Has normal power factor ballast but can be furnished with H.P.F. ballast at slightly higher price. Fluorescent lamps not included.

STEBER STURDIFLEX

SPECIFICATIONS

Cat. No.	Lamp Watts	Length Overall Inches	Wt.Lbs. Carton	Wt.Lbs. Std. Pkg.	Wt.Lbs. Std. Pkg.	Price Each
ABL- 1	60	30	1	1	5¾	$12.20
ABL- 2	60-100	30	1	1	6	12.60
ABL- 3	60	36	1	1	6	12.30
ABL- 4	60-100	36	1	1	6¼	12.75
ABL- 5	60	23	1	1	4½	10.15
ABL- 6	60-100	23	1	1	4¾	10.60
ABL- 7	60	29	1	1	4¾	10.25
ABL- 8	60-100	29	1	1	5	10.65
ABL- 9	60	23	1	1	5	10.35
ABL-10	60-100	23	1	1	5¼	10.90
ABL-11	60	29	1	1	5¼	10.50
ABL-12	60-100	29	1	1	5½	11.00
ABL-13	60	44	1	1	6¼	13.75
ABL-14	60-100	44	1	1	6¼	14.25
ABL-220	2-20 w†	‡	1	1	11	29.75

†Fluorescent. ‡18-inch radius, 24 inches high.

STEBER HAYMOW GLASS ENCLOSED LIGHTING UNITS

FOR OUTLET BOX OR ½-INCH CONDUIT MOUNTING

With combination cover which fits 3¼ or 4-inch standard outlet box, or with vertical or horizontal caps for ½-inch conduit mounting. Graytone Ultranamel finish — recommended for haymow, milk houses, barns, dairies, and general farm use.



No. HO



No. HV



No. HH

For Mounting on 3¼ or 4-Inch Outlet Boxes, Complete with Globe

Cat. No.	Lamp Watts	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
HO	60 to 100	12	23	$2.30

With ½-Inch Vertical Conduit Fitting, Complete with Globe

HV	60 to 100	12	22	2.30

With ½-Inch Horizontal Conduit Fitting, Complete with Globe

HH	60 to 100	12	23	2.40



No. HOG

For Units Complete with Guard

Cat. No.	Lamp Watts	Std. Pkg.	Pkg. Wt.	Price Each
HOG	60-100	12	25	$3.10
HVG	60-100	12	24	3.20
HHG	60-100	12	28	3.30

Cat. No.	Description	Std. Pkg.	Wt.Lbs. Std.Pkg.	Price Each
HGG	7-inch Glass Globe only	12	20	$0.85
HWG	Guard only	12	6	1.00

STEBER ELECTRIC BROODER EQUIPMENT

PBU-1 UNIVERSAL BROODER

For Chicks, Poults, Pigs, Lambs, etc.



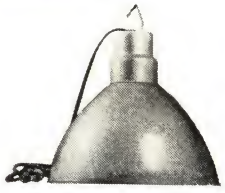
This single lamp reflector for 250-R-40/1 heat lamp provides an efficient and economical method of reducing small stock losses where litters or broods are limited or where it is desired to install several units in corners of an average size brooder house. Features 10½ inch heavy duty hood, special hanger, porcelain heat-resistant lamp socket and approved cord and plug. Finished in durable Graytone Ultranamel.

Supplied with steel guard to prevent lamp from coming in close proximity to inflammable material.

Cat. No.	Lamp Watts	Hood Diam.	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
PBU-1	250	10½	1	6	18	**$5.00**

PBU-57—ECONOMY TYPE BROODER

For Chicks, Poults, Pigs, Lambs, etc.



PBU-57 is a smaller, lower priced brooder than PBU-1, but it also accommodates the R-40 250 watt infrared lamp and will serve the same application described for PBU-1. Completely assembled and factory wired. Heavy gauge steel hood 7½ inches in diameter — porcelain socket — suspension loop — approved cord and plug. Hood finished Graytone Ultranamel with white reflecting surface.

Cat. No.	Diameter Hood	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
PBU-57	7½	1	6	11	**$3.50**

PBU-6—SIX LAMP BROODER

Capacity—500 Chicks



This multi-lamp brooder is furnished three ways as listed. Effective heat pattern with six lamps operating, approximately 40 square feet.

PBU-6—sturdy steel channel 5 ft. long, 5 inches wide and 2 inches deep — six porcelain sockets — 2 hanger loops — approved cord and plug.

PBU-6-S—same as PBU-6 plus three-way canopy switches, each controlling three lamps. One to six lamps can be operated depending on brooder house temperatures.

PBU-6-T—same as PBU-6 plus wafer thermostat which can be set to turn three lamps off or on any pre-determined brooder house temperature.

Cat. No.	Auxiliary Equipment	Pkg. Wt.	Price Each
PBU-6	None	7½	**$16.00**
PBU-6S	Two manually-operated 3-way canopy switches	7½	**19.50**
PBU-6T	Thermostat controlling 3 lamps	7½	**24.00**

Carton, 1; standard package, 1.

STEBER ELECTRIC BROODER EQUIPMENT

PBU-3—THREE LAMP INFRARED BROODER



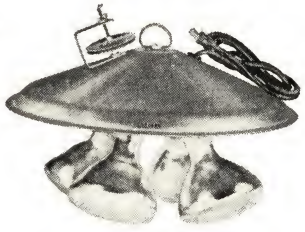
This Steber infrared Heat Lamp brooder has been designed to make available to all poultry raisers an efficient, simple and economical means of raising chicks in broods of 250, with less labor and a greater percentage of the starting flock brought to profitable maturity.

The 17-inch heavy gauge steel hood is drawn in one piece, with three heat resisting lamp sockets securely mounted to provide a heat pattern of ample area to foster a brood of 250 chicks. Hanger loop is welded to the top of the unit for easy suspension by chain, baling wire or other secure means. Approved cord and plug as well as the three lamp sockets are factory wired. The unit is simply suspended over the brooding area with Chicks properly confined by barrier, cord is plugged into convenience receptacle and the brooder is ready for operation.

Finished outside in tough, durable, Graytone Ultranamel with white interior. Available with or without multiple canopy switch permitting operation of one lamp, two lamps or three lamps, with additional off position. Recommended for use with R-40, 250 watt infrared heat lamps.

Cat. No.	Description	Ctn. Qty.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
PBU-3	Three Lamp Brooder	1	6	24	**$7.25**
PBU-3S	Same as PBU-3, with 3-way Switch	1	6	24	**8.25**

PBU-4-T—FOUR LAMP BROODER



No. PBU-4-T four lamp unit is identical in size and construction to No. PBU-3. It accommodates one additional lamp, increasing its capacity to 300-350 chicks. Brooding area approximately 20 square feet.

PBU-4-T is equipped with wafer thermostat which automatically controls two of the four lamps. This thermostat can be adjusted to turn off two lamps when the brooder house temperature is sufficiently high to make unnecessary the operation of four lamps. It will turn these lamps on again when the temperature drops. Maximum utilization of electrical energy is thus accomplished in a moderately priced unit ideal for farm or broiler plant operation.

Heavy gauge steel hood 17 inches in diameter—four porcelain sockets — suspension loop — wafer thermostat — approved cord and plug. Hood finished in durable Graytone Ultranamel with white reflecting surface.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.	Price Each
PBU-4-T	Wafer Thermostat	1	6	14	**$12.75**

UNION LIGHTING FIXTURES

No. 159 HAYMOW LIGHTING FIXTURE



No. 159

Glass globe is standard wide mouth quart canning jar. Recommended for use in such hazardous locations as barns, chicken houses, grain warehouses, etc., where the 1947 National Electrical Code does not require special fittings covered by Article 500.

The No. 159 Haymow Lighting Fixture is designed for those dusty and mildly corrosive locations where the cost of the conventional dust and vapor proof fixtures exclude their use.

Socket, cover and globe holder are made of heavy sections of molded Bakelite. Will resist corrosive effects of moisture as well as mild acid and alkaline atmospheres, such as exist in most farm outbuildings.

The entire fixture is insulated. Danger of exposed metal parts becoming energized is eliminated. Mounts on standard 3¼ and 4-inch outlet boxes. For normal use—100 watt lamp; where lit continuously—60 watt lamp.

Cat. No.	Description	Carton	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Per 100
159	Fixture and Globe	1	25	46	$120.00
159-G	Globe only	12	12	15	23.10

No. 159, listed by Underwriters' Laboratories, Inc.

STEBER UTILITES

Listed by Underwriters' Laboratories, Inc.

PAR-38 AND R-40 LAMPHOLDERS

No. 2 UTILITE

Weatherproof outdoor holder for use with PAR-38 lamps, equipped with flat round gasket to permit watertight fit between lamp and holder. Made of drawn steel with weatherproof finish, and special means of dissipating heat at socket terminals. Universal adjustment. Mounted on 4¼-inch base plate punched for wall bracket or outlet box mounting. Approved cord and plug.



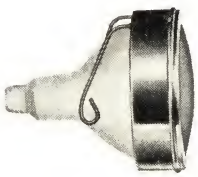
No. 2-S same as No. 2 Utilite except that 6-inch ground spike for ground mounting is furnished instead of round base plate.

Cat. No.	Mounting Provision	Std. Pkg.	Pkg. Wt.	Price Each
2	Base plate for surface or outlet box mounting	12	12	$2.35
2-O	Same as No. 2 but without cord and plug	12	9	2.00
2-SO	Base plate and ground spike	12	12	2.50
2-S	Ground spike	12	12	2.40

Lamp not included. Carton quantity, 1.

STEBER COLOR EQUIPMENT

U-40 UTILITE LENS HOLDER



This improved U-40 lens has a deeper collar for increased efficiency. It is equipped with sturdy spring clip and is easily attached to either PAR-38 or R-40 lamp. U-40 is available with heat resisting lenses in amber, blue, green and red, as listed below.

Cat. No.	Description	Std. Pkg.	Pkg. Wt.	Price Each
U-40	Lens Holder	12	5	$0.70

UTILITE HEAT RESISTING COLOR LENSES

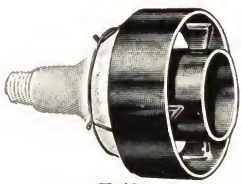
These lenses are heat resisting and may be used with safety indoors with 300 watt R-40 lamps. For outdoor use, these lenses will withstand all atmospheric conditions, even where severe changes in temperature may take place.



U-45

Cat. No.	Description	Std. Pkg.	Pkg. Wt.	Price Each
U-45	Heat Resisting Lens only in standard colors (use suffix A, R, G, B to denote amber, red, green or blue)	36	15	$0.90

UTILITE CONCENTRIC LOUVER



U-48

Consists of two concentric steel bands arranged to intercept horizontal light and provide cut-off. U-48 type is attached to lamp by wire clips secured by flexible wire wound around lamp. Furnished in mat black for concentrated light or mat white for greater diffusion. Add suffix B or W to catalog numbers to denote black or white. U-49 baffle louver is available, fits into the U-40 holder with colored lens.

Cat. No.	Description	Std. Pkg.	Pkg. Wt.	Price Each
U-48	Concentric Louver	6	3½	$0.75
U-49	Baffle Louver	6	3½	.75

UTILITE WIRE GUARDS

Utilite Guard No. U-60 affords protection against lamp breakage. Clamp arrangement permits quick attachment to Steber Nos. 2, 2-S, 2-SO, 3 and 3-C Utilites.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.	Price Each
U-60	Wire Guard only	6	6	4	$1.00

UTILITE COMBINATIONS

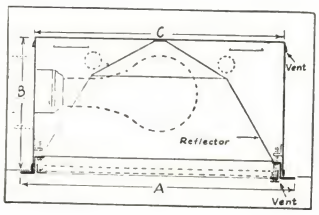
Lens Holder and Heat Resisting Lenses

Cat. No.	Description	Std. Pkg.	Pkg. Wt.	Price Each
U-46	U-40 Lens Holder with 1 Heat Resisting Lens*	6	5	$1.60
U-47	Lens Holder and 4 assorted Heat Resisting Lens in standard colors	6	10	4.25

*Use suffix A, R, G, B to denote amber, red, green or blue.

K

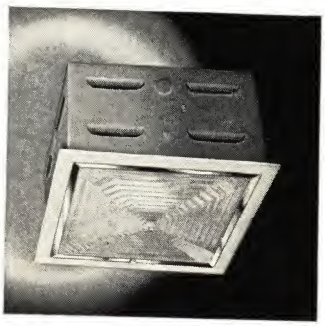
KIRLIN RECESSED LIGHTING
Flush With Ceiling



INCANDESCENT—Square Models

With square Alzak reflectors.

Standard finish, Satin stainless door, white ground coat frame, non-ferrous. No. 1218 steel frame, chrome plated steel door. All units can be supplied with shock-proof glass on special order, or with top of box removable for relamping from above ceiling. All have Und. Lab. Labels. Satin chrome frames also available.



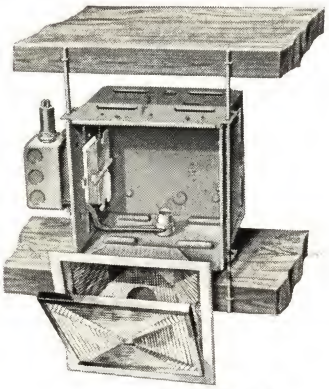
Junction Box for "R" Wire and Hanger Rods supplied.
No Asbestos Wire required, no carpenter work.

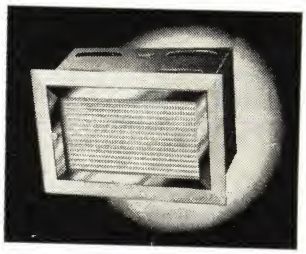
For Wide Distribution of Light

Cat. No.	Maximum Watts	Size for Ceiling Opening
1207	60—100	7¾ x 7¾ x 5⅛" deep
1208	75—150	9¼ x 9¼ x 5½" deep
1212	200—300 med.	13¼ x 13¼ x 7⅝" deep
1218	300—500 mog.	19⅜ x 19⅜ x 13 " deep*
1512†	200—300 med.	13¼ x 13¼ x 7⅝" deep

*Lamp vertical.

†Same as No. 1212 except with clear center in lens for Dining Rooms and Jewelry Stores.





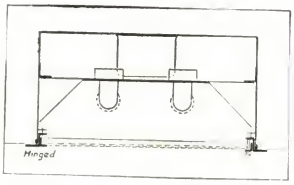
INCANDESCENT—Rectangular Models

No. 414-75W T10 tubular lamp. Box 14⅛x 3¾x4 inches deep. No. 508-100W. Box 8½x 5½x6 inches deep. No. 614 150W. Box 13x 7½x5¾ inches deep. Standard finish, satin stainless door, white ground coat frame. Alba-lite Corning glass; Alzak reflector.

EXITS—Recessed Flush

No. 4506, 6 in. letters, Box 7½x13⅛x3⅝ inches deep. No. 4516 "No-Guard," same size. May be had with two sockets at extra charge. "No-Guard" type hinged exit requires no guard in Gymnasiums, as strong as the wall. White letters, red or green background. No. 4507 "V" type, surface mounted.





FLUORESCENT—Recessed Flush with Ceiling

All units with Und. Lab. Labels, designed for wide distribution of light, lamps spaced 3½" for maximum efficiency. H.P.F. ballasts, reflectors baked synthetic enamel, hinges concealed. Two lamp units fit 12-in. acoustic tile ceilings. Standard finish, white ground coat for painting. Frames are separate from box and adjustable. Individual sections or continuous runs.



Hinged Door Type Alba-lite Glass	Size for Ceiling Opening in Inches	Open Troffer Type (Louvers Extra)†
220B	2-20w 11¾ x 24½ x 6¼ deep	220TR
420B	4-20w 16⅜ x 24½ x 6¼ deep	420TR
230B	2-30w 11¾ x 36½ x 6¼ deep	230TR
240B	2-40w 11¾ x 48½ x 6¼ deep	240TR
340B	3-40w 11¾ x 48½ x 6¼ deep	340TR
440B	4-40w 16⅜ x 48½ x 6¼ deep	440TR

†Egg Crate or Disc Louvers.

KIRLIN DISC LOUVER—For fluorescent lamps, snap on quickly, white enamel baked finish on spring steel. Discs may be interlocked on 2 lamps or more. 48 in. louver weighs 11 oz. The original disc-louver. A full size louver, 4¼ inches wide.



No. 60D length 60" 100w
No. 48D length 48" 40w
No. 36D length 36" 30w
No. 24D length 24" 20w
No. 18D length 18" 15w

PRESCOLITE

recessed lighting fixtures

EXCLUSIVE FEATURES

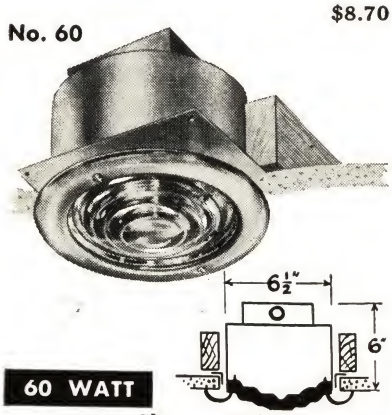
Heat resisting glassware.
Plaster flanges adjust from ¼" to 1".
A type and style for any application.

CHROME FINISH IS STANDARD—SPECIFY BRASS OR ALUMINUM IF DESIRED.

EACH FIXTURE PACKAGED INDIVIDUALLY

$8.70

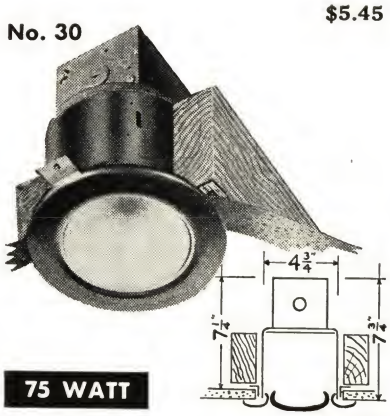
No. 60



60 WATT

$5.45

No. 30



75 WATT

$7.75

No. 62



60 WATT

$8.55

88-6100



100 WATT

$11.00

88-6500

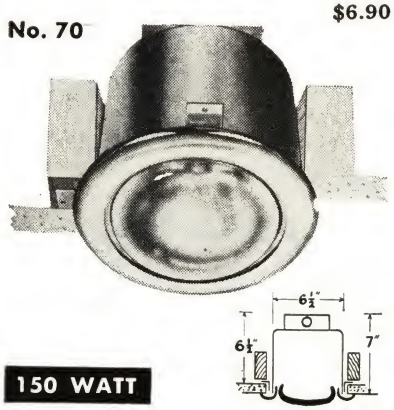


100 WATT

Chrome finish is standard, for aluminum or brass add "A" or "B" to Catalog Number.
All finishes same price.

$6.90

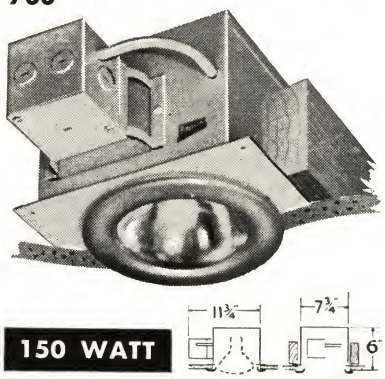
No. 70



150 WATT

$8.80

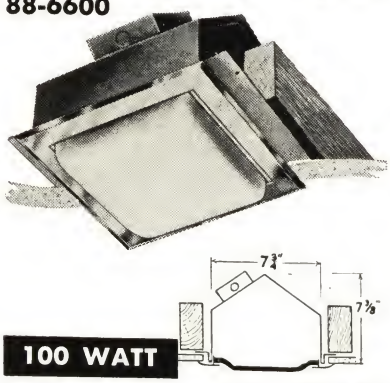
700



150 WATT

$11.00

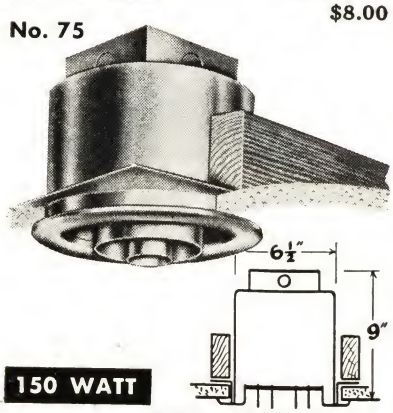
88-6600



100 WATT

$8.00

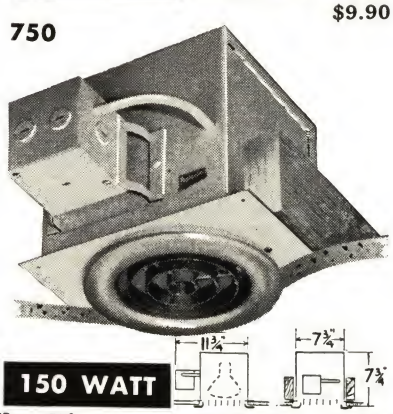
No. 75



150 WATT

$9.90

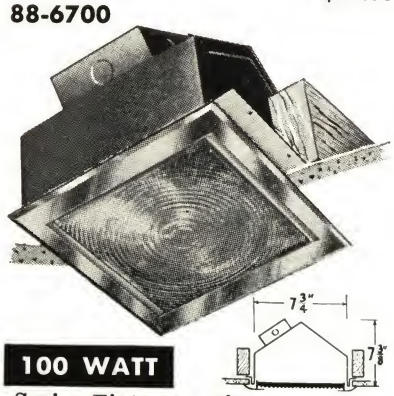
750



150 WATT

$11.05

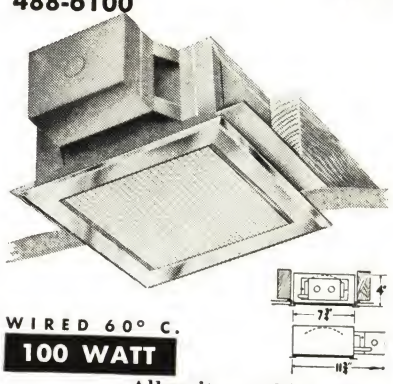
88-6700



100 WATT

Relamp-A-Lite Swing-Way Hinges are standard on all 88 Series Fixtures

488-6100 $9.10



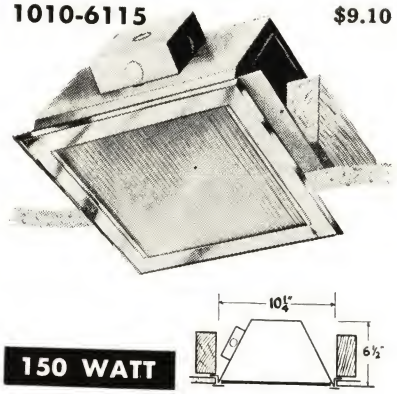
WIRED 60° C.
100 WATT

1015-6115 $10.70



WIRED 60° C.
150 WATT

1010-6115 $9.10



150 WATT

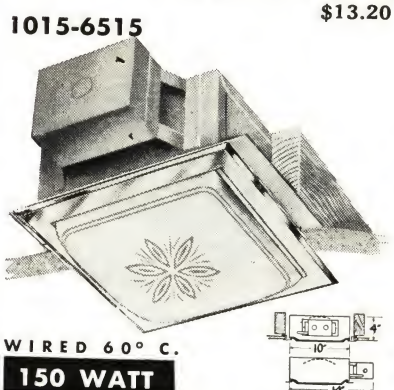
All units on this page are equipped with the patented Relamp-a-lite swing-away hinge.

488-6500 $11.55



WIRED 60° C.
100 WATT

1015-6515 $13.20



WIRED 60° C.
150 WATT

1010-6515 $11.60



150 WATT

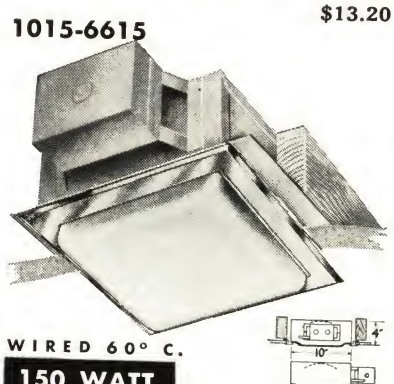
The 488 and 1015 series are wired units — approved for Type "R" Wire.

488-6600 $11.55



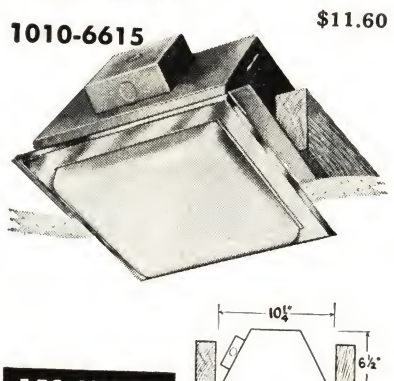
WIRED 60° C.
100 WATT

1015-6615 $13.20



WIRED 60° C.
150 WATT

1010-6615 $11.60



150 WATT

Chrome finish is standard, for aluminum or brass add "A" or "B" to Catalog Number.
All finishes same price.

488-6700 $11.60



100 WATT

1015-6715 $14.20



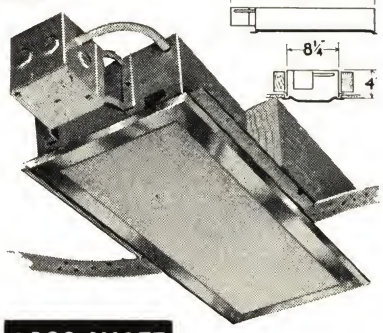
150 WATT

1313-6630 $19.35



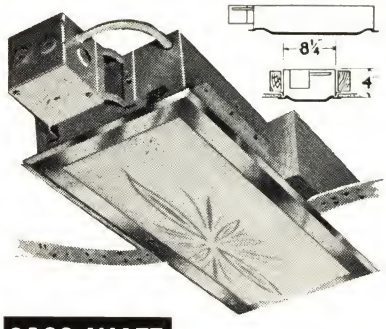
300 WATT

820 — $15.95



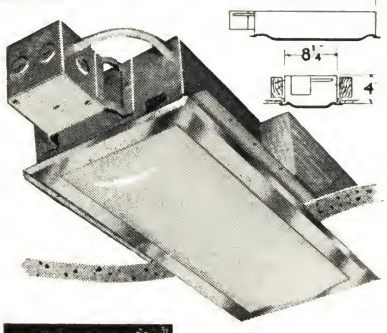
2-100 WATT Wired 60°C

6520 — $18.65



2-100 WATT Wired 60°C

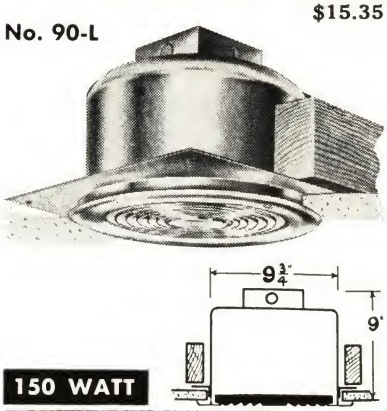
6620 — $18.65



2-100 WATT Wired 60°C

The 820, 6520, 6620 Fixtures are Wired Units — Approved for use with any Standard Building Wire

No. 90-L — $15.35



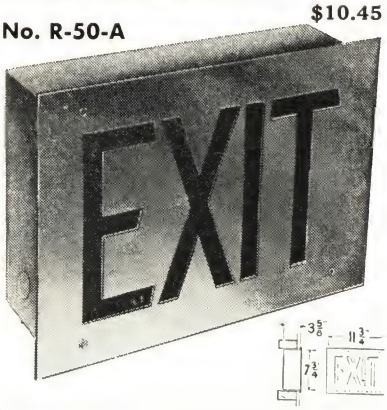
150 WATT

No. 1313-L — $21.90



300 WATT

No. R-50-A — $10.45



SWIVOLITE

Gray is Standard Finish. Other Finishes Available: Satin Chrome, Green, Coral, Bronze, Brass



150 WATT OR LESS **A-44**—Ceiling Type, Direct or Focal. No Switch. **$7.95**



150 WATT OR LESS **B-44-2** — Twin Ceiling Type, Direct or Focal. No Switch. **$14.75**



150 WATT OR LESS **B-44-3**—Triple Ceiling Type, Direct or Focal. No Switch. **$19.75**



150 WATT OR LESS **A-22**—Ceiling or Wall Type, Direct or Indirect. No Switch. **$7.95**



100 WATT OR LESS **A-11**—Wall Type, Direct or Indirect. With Switch. **$8.25**



150 WATT OR LESS **AX-44**—Pipe Unit with Swivel. Standard Overall Length 35 inches. Other lengths available. **$11.95**



2-150 W. OR LESS **AX-44-2** — Pipe Extension Type with 2 adjustable Lights on Cluster. Overall Length 37 inches. **$24.95**



3-150 W. OR LESS **AX-44-3** — Pipe Extension Type with 3 Adjustable Lights on Cluster. Overall Length 37 inches. **$32.95**



150 WATT OR LESS **B-22**—Portable Projector for Spot or Floodlighting. Equipped with Switch and 8-ft. Cord. **$9.25**



150 WATT OR LESS **AC-11**—Wall Pin-Up with Switch, Cord and Plug. **$8.50**



100 WATT OR LESS **AKC-11** — Single Pin-Up with Switch, Cord and Plug. **$9.25**



2-100 W. OR LESS **AKC-11-2** — Twin Pin-Up with 3-Way Switch and Cord. **$18.75**



100 WATT OR LESS **BK-11**—Single Desk Model with Switch, Cord and Plug. **$9.95**



2-100 W. OR LESS **BK-11-2** — Twin Desk Model. 3-Way Switch and Cord. **$19.95**

KLIEGL FOOTLIGHTS

DISAPPEARING TYPES

When not in use are closed down flush with stage floor. Furnished in standard 5 ft. lengths. Completely assembled. Wired for 3 colors. Automatic mercury "on" and "off" circuit switches. Solid kiln-dried oak flooring. Malleable iron cross brackets, positive latches. Terminal blocks for feeder connections.



Open trough style with continuous reflector, sprayed white. For use with colored lamps.

No. 829—Single row receptacles, continuous flooring, 5 ft. sections, 15 outlets, 60/100 watts **$71.50**

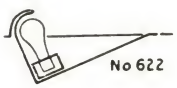


Individual reflector styles, with individual Alzak aluminum reflectors and glass color-roundels; for use with clear or inside-frosted lamps.

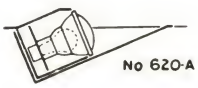
No. 832—Single row individual reflectors, hinged mounting continuous flooring, 5 ft. section, 12 outlets, 100 watts.....**$88.00**

PERMANENT TYPES

Fixed in position. Hood extends minimum above stage floor. Any length or curvature required. Wired as specified, for 3 or more colors. Receptacles spaced as indicated.



No. 622 — Single row receptacles, open trough continuous reflector sprayed white, 60/100 watt outlets, spaced 4″ on centers....Price on application*



No. 620A — Single row receptacles, individual Alzak aluminum reflectors, glass color roundels, 100 watt outlets, spaced 6″ on centers.
Price on application*

*Specify: length, straight or curved, and number of lamps for each color.

KLIEGL LIGHT STRIPS

STAGE TYPES



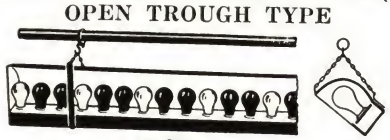
Used at entrances, back of transparencies, behind ground rows, and for general service. Portable trough reflector with series of screw-base receptacles for 40/150 watt lamps, wired on one 2-wire circuit, terminating in suitable splice box.

Cat. No.	Description	Length Feet	Price Each
649	2-light strip	1½	**$ 9.35**
650	4-light strip	3	**16.50**
651	6-light strip	5	**19.80**
652	10-light strip	8	**26.40**

KLIEGL BORDERLIGHTS

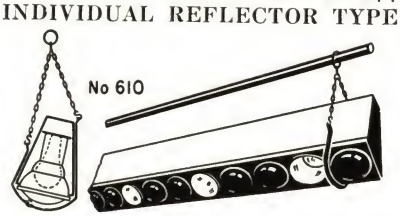
Any continuous length, or in sections. Wired as specified, for 3 or more colors. Complete with splice box, scenery guards, and chain hangers.

OPEN TROUGH TYPE



No. 600—For colored lamps. Continuous reflector sprayed white, 60/100 watt outlets, spaced 4″ on centers.....Price on application

INDIVIDUAL REFLECTOR TYPE



For clear or inside frosted lamps. Alzak aluminum individual reflectors. Heat-resisting glass color roundels, hinged-ring roundel holders. Porcelain screw-base receptacles.

No. 610—100 or 150 watt outlets (as specified) 6″ on centers.....Price on application

KLIEGL POCKETS AND PLUGS

STAGE-FLOOR TYPE POCKETS



Set in floor flush with surface. Have hinged self-closing cover notched for passage of cable. Fitted with heavy-duty plug outlets. Furnished complete with plugs. Listed by Underwriters.

No. of Outlets	2-Wire, No Ground: Cat. No.	Amperes per Outlet	Price Each	2-Wire, Plus Ground*: Cat. No.	Amperes Per Outlet	Price Each
1	**351**	50	**$18.70**	**355**	30	**$22.55**
2	**352**	{1–25} {1–50}	**30.80**	**356**	30	**38.50**
3	**353**	25	**38.50**	**357**	30	**56.65**
4	**354**	25	**50.60**	**358**	30	**74.80**

*Plus Ground: Outlets have additional contactor for extra ground wire; an additional main terminal also is provided for ground-wire feeder connections.

WALL TYPE POCKETS

Heavy-duty plug outlets for use wherever heavy current temporary connections are required — in theatres, projection booths, photographic studios, hotels, schools, industrial plants, etc. Furnished complete with plugs. Listed by Underwriters.

No. of Outlets	2-Wire, No Ground: Cat. No.	Amperes Per Outlet	Price Each	2-Wire, Plus Ground*: Cat. No.	Amperes Per Outlet	Price Each
		Flush Wall Mounting				
1	**310**	50	**$14.85**	**361**	30	**$20.90**
2	**311**	50	**23.65**	**362**	30	**35.75**
3	**312**	50	**34.65**	**363**	30	**52.80**
4	**313**	50	**45.65**	**364**	30	**69.85**
1	**1310**	100	**31.90**	**2310-G**	60	**33.00**
1	**4310**	200	**44.00**	**4310-G**	100	**52.80**
		Surface Wall Mounting				
1	**307**	50	**$11.00**	**366**	30	**$17.05**
2	**317**	50	**19.80**	**367**	30	**31.90**
3	**318**	50	**29.70**	**368**	30	**47.30**
4	**319**	50	**39.60**	**369**	30	**63.80**
1	**1307**	100	**22.00**	**2307-G**	60	**22.00**
1	**4307**	200	**39.60**	**4307-G**	100	**48.40**

*Plus Ground: Outlets have additional contactor for extra ground wire; an additional main terminal also is provided for ground-wire feeder connections.

KLIEGL PLUGGING BOXES
PORTABLE TYPES


No. 476

For conveniently and quickly connecting several circuits to single outlet. Plug receptacles mounted in fire-proofed case. Each receptacle independently fused. Feeder cable enters through special clamp.

No. of Outlets	Amperes per Outlet	2-Wire Main Cat. No.	2-Wire Main Price Each	3-Wire Main Cat. No.	3-Wire Main Price Each
		Ungrounded System*			
6	30	**346–2**	**$52.80**	**346–3**	**$52.80**
12	30	**401**	**105.60**	**403**	**105.60**
4	50	**404**	**44.00**	**405**	**44.00**
6	50	**406**	**63.80**	**407**	**63.80**
		Grounded System†			
2	30	**472**	**46.20**	**473**	**49.50**
4	30	**474**	**68.20**	**475**	**71.50**
6	30	**476**	**100.10**	**477**	**104.40**

*Ungrounded types listed have 2-wire no-ground outlets.
†Grounded types listed have 2-wire-plus-ground outlets, and both 2- and 3-wire mains have extra terminal for ground wire feeder connections.
Furnished with cartridge fuses, unless otherwise ordered. Other arrangements for heavier current demands also available.

KLIEGL LIGHTS
AISLE, STEP AND CORRIDOR


No 2780

No. 2780—Midget model for mounting on side of end seats adjoining aisle. For 6 watt 115 volt candelabra screw base lamp; size: 4⅝" L. x 1¼" H. x 1⅜" D. Price, ...**$3.85**


No. 675

No. 675—Aisle spot for mounting on side of end seats adjoining aisleways. Cast aluminum housing with control lens, and receptacle for 10 watt S 14 lamp; size 3" W. x 6" H. x 2¾" D. Price, ...**$5.95**


No 2677

No. 2677—Step light for stairways, mounted flush in riser. Louvered opening direct light to tread. Removable cast aluminum front. For 40 watt medium screw base lamp; size: 8" W. x 4⅛" H. x 3½" D. Price, **$5.50**


No. 2666

No. 2666—Aisle light for flush wall mounting. Louvered front directs light to floor. For 40 watt medium screw base lamp. Front removable; size: 4⅞"W. x 8¼" H. x 3½" D. Price, ...**$5.50**


No. 2681

No. 2681 — Corridor light, for flush wall mounting, cast bronze removable front, wire-glass face. For 40 watt medium screw base lamp; size: 4⅛" W. x 8" H. x 3½" D. Price, ...**$8.80**

KLIEGL DOWNLIGHTS
OVER-CEILING FIXTURES

Concealed types. Project light beam through small hole in ceiling. Provide high-intensity direct illumination. Various designs for both general and defined-area lighting.


No. 2503

FIXED BEAM TYPES

For general lighting. Give soft edge beam. Use standard service lamps.

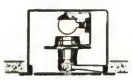
Furnished with ellipsoidal reflector and fixed-focus lens system. Relamped from above or below ceiling.

Cat. No.	Description	Price Each
2501	150 watt, medium screw base.....	**$55.20**
2503	200/300 watt, medium screw base ..	**55.20**
2504	300/500 watt, mogul screw base.....	**82.80**
2505	750/1000 watt, medium Bipost.....	**86.25**

KLIEGL DOWNLIGHTS
ADJUSTABLE BEAM TYPES

For defined lighting and general illumination, for straight down or approximately 45-degree angular projection. Sharp or soft-edge cut-off. Shape and size of beam can be regulated. Equipped with focusable lens system, adjustable framing shutters, and reflector. Use concentrated filament type lamps.

Pin-Hole Spot Units


No 2145

Relamped from below. Furnished with plaster ring, removable aperture plate, spherical reflector. Listed by Underwriters'.

Cat. No.	Rating Watts	Projection	Price Each
2145	100	Straight Down..	**$41.40**
2146	100	Angular	**41.40**

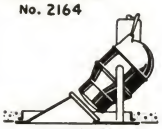
High Ceiling Units

Relamped from above. Finished with plaster cone, and ellipsoidal reflector.


No. 2164

Straight Down Projection

Cat. No.	Description	Price Each
2164	250/500 watt	**$46.00**
2166	1000 watt	**78.20**
2168	1500/2000 watt	**95.45**


No. 2165

Angular Projection

Cat. No.	Description	Price Each
2165	250/500 watt	**$52.90**
2167	1000 watt	**82.80**
2169	1500/2000 watt	**101.20**

KLIEGL RECESSED CEILING FIXTURES
FRESNEL-LENS UNITS

Flush inbuilt type. Provide high intensity direct illumination. Accommodate standard screw base general-service incandescent filament lamps. Furnished complete with back box, mounting arrangements, wired porcelain receptacle, Alzak aluminum reflector, Fresnel lens with painted risers, and hinged front frame.

CIRCULAR LENS TYPES

Fitted with circular Fresnel lens of listed diameter. Circular front frame. Cylindrical back box. Plaster ring.


No 22 F 12

Cat. No.	Lens Diam. Inches	Lamps Watts	Price Each
22 F 06	6	100	**$20.70**
22 F 08	8	150	**25.30**
22 F 12	12	200/300	**34.50**
22 F 14	14	300/500	**46.00**
22 F 16	16	500/750	**57.50**

SQUARE LENS TYPES

Fitted with square shaped Fresnel lens of indicated size. Square hinged front frame. Rectilinear back box.


No 24 F 12

Cat. No.	Lens Diam. Inches	Lamps Watts	Price Each
24 F 06	6	100	**$25.30**
24 F 08	8	150	**29.90**
24 F 12	12	200/300	**34.50**

KLIEGL ILLUMINATED EXIT SIGNS

FLUSH WALL TYPES



No 697

Recessed in wall flush with surface. Wall box and front frame furnished as separable parts.

Hinged screw-on style front—sheet metal frame, sprayed bronze finish. Ruby glass face plate. Plain white letters.

Cat. No.	Letters Inches	Front Frame Inches	Box Depth Inches	Price Each
6945	5	12½x 8	3½	**$8.36**
6946	6	15 x 9	3½	**9.90**
6948	8	17 x11½	3½	**11.55**

Pigtail wired socket installed in above.

Pivoted Panel style front—cast bronze frame with hinged panel, statuary bronze finish. Ruby glass face plate. Fancy white letters.

Cat. No.	Letters Inches	Front Frame Inches	Box Depth Inches	Price Each
696	3	14¼x 7	5	**$22.00**
697	4	15¾x 9	5	**26.40**
699	6	17¼x10⅜	5	**34.10**
698	8	18 x12	5	**41.80**
697W	Same as No. 697 but with wire guard			**30.80**

Pigtail wired socket in above.

SURFACE TYPES



No 685

Mounted on surface of wall, or semi-recessed, allowing ½" projection for removal of glass panel. Glass slides in from side. Single face signs, sheet metal box, sprayed gold bronze finish, ruby glass face plate, white letters.

Cat. No.	Letters Inches	Box Inches	Box Depth Inches	Price Each
680	3	10 x 5	3½	**$5.50**
685	5	11½x 6¾	3½	**6.05**
686	6	14 x 8	3½	**6.60**
687	8	12 x10	3½	**6.60**
690	8	15¾x10	3½	**7.15**

Pigtail wired socket installed in above.

Double face signs also available.

DOUBLE FACE TRIANGULAR

Cat. No.	Letters Inches	Box Inches	Box Depth Inches	Price Each
688	6	10x8	9½	**$14.52**

OUTLET-BOX TYPES



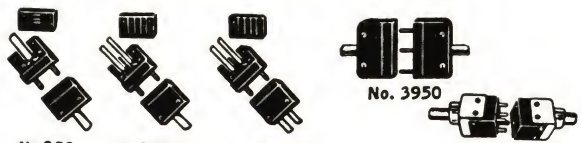
No. 711-A

No. 711-A—Made for attachment to standard octagonal 4" outlet box in wall—includes base plate, medium screw receptacle socket, red lens with opaque letters. 5" diameter; 2" letter on front.

Cat. No.	Finish	Price Each
711-A	Brushed Brass or Statuary Bronze	**$6.05**
711-C	Chrome Plated	**7.70**

KLIEGL CONNECTORS

SEPARABLE PIN PLUG

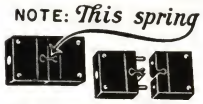


No 955 No 955 AC No 955 AA No. 4950

Made in two sections. Male end fitted with brass split pins, female end with brass sleeve. All live parts insulated with solid fibre. Listed by Underwriters.

Amps.	2-Pole Cat. No.	2-Pole Price Each	3-Pole Cat. No.	3-Pole Price Each	4-Pole Cat. No.	4-Pole Price Each
5	**950**	**$1.65**	**3950**	**$3.30**	**4950**	**$6.05**
15	**955**	**2.20**	**3955**	**5.28**	**4955**	**7.26**
30	**956**	**3.08**	**3956**	**6.60**	**4956**	**10.45**
60	**957**	**6.49**	**3957**	**8.80**	**4957**	**15.95**
100	**958**	**16.33**	**3958**	**23.87**	.....	.....
200	**959**	**39.60**	.....	.....	.....	.....

Note: Two-pole connectors listed are for connecting duplex to duplex. For connecting duplex to pair single conductor, add suffix "AC" to catalog number. For connecting two pair single conductor, add suffix "AA" to catalog number. Price same as for duplex to duplex.



Spring catch for 5/30 amp. 2-poe connector: **$0.38** additional.

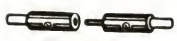
Connectors Nos. 950 to 957 inclusive, 3950 and 3955 are reversible; can be furnished non-reversible at **$0.60** each additional.

Connectors with any number of pins from 1 to 30 are available, also flush types.

For grounded systems, following connectors have additional pin with terminal provisions for extra ground wire.

2-Pole Plus Ground Cat. No.	Amps.	Price Each	4-Pole Plus Ground Cat. No.	Amps.	Price Each
955-G	20	**$3.85**	**4957-G**	60	**$20.35**
956-G	30	**6.60**	.....	....	.....

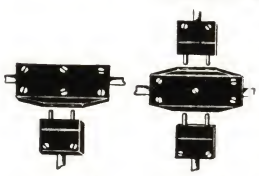
SINGLE POLE


No. 971

Split-pin and sleeve encased in bakelite; holes in outer ends for insertion of wires, with recessed screw to hold wire in place.

Cat. No.	Amp.	Price Each	Cat. No.	Amp.	Price Each
971	5	**$0.73**	**974**	60	**$4.40**
972	15	**1.43**	**975**	100	**5.50**
973	20	**2.42**	**976**	150	**7.70**

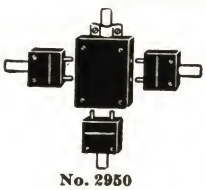
BRANCH-OFF TYPES


No. 990 No. 995

Permit one or more plug connections from one feed cable, at intervals throughout its length. Cable passes through plug receptacle and is attached by binding screws, without cutting wires. Furnished with plugs.

Cat. No.	Description	Amps. 250 V.	Price Each
990	Single, with plug.....	5	**$3.85**
995	Double, with 2 plugs.....	5	**4.62**

MULTIPLE CIRCUIT TYPES


No. 2950

Provide three separate plug connections from one feed cable. Attached to one end of cable. Furnished with plugs.

Cat. No.	Amps. 250 V.	Main Cable No.	Price Each
2950	5	12	**$5.72**
5955	15	8	**7.15**

KLIEGL "KLIEGLIGHTS"

High intensity light beam projectors with ellipsoidal reflectors, lens systems, and coordinated shutter arrangement which permits direct regulation of size and shape of beam in every conceivable manner, so as to confine the light within any desired area. Accommodate standard bipost base up burning concentrated filament lamps.

MOUNTED TYPES


No 1163

For permanent installation. Supplied with square shutters, short leads, wall bracket, pipe clamp or table base. (Can be supplied on floor-stands at additional cost).

Drop-In Shutter Arrangement

Cat. No.	Watts	Lens Diam. Inches	Price Each
1163-B	250/500	5	$36.80

Built-In Square Shutter Arrangement

Cat. No.	Watts	Lens Diam. Inches	Price Each
1365-B	250/500	6	$44.00
1165-B	250/500	6	67.10
1366-B	1000/2000	6	110.00
1368-B	1000/2000	8	121.00

For Iris Shutters, add **$16.50** to above prices.

BOOTH-SPOT TYPES


No 1178

High powered. Mounted on telescopic floor stands with rubber tired casters. Equipped with built-in iris and curtain shutters. Controls conveniently located and arranged for quick and easy manipulation. Furnished with 25 ft. cable and switch.

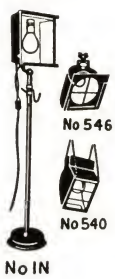
Cat. No.	Model Designation	Lamp Watts	Lens Dia. Inches	Price Each
1174	Super-Klieg	2000	12	$269.50
1178	Dyna-Beam	3000	12	462.00
1179*	Dyna-Beam	3000	12	625.00

*No. 1178 Dyna-Beam Klieglight additionally equipped with five-color boomerang.

KLIEGL FLOODLIGHTS

STAGE UNITS

Used from side wings or from overhead on the stage. Provided with slide grooves on front for color frames with gelatine mediums. For P.S. lamps.



STANDING TYPES

No. 1N—Open-box reflector sprayed white, grooves for color frame; 500/1500 watt; pedestal floor stand, 25 ft. cable.....**$39.60**

No. 2N—Parabolic boxed Alzak aluminum reflector; grooves for color frame; 500/1500 watt; pedestal floor stand, 25 ft. cable.....**$46.20**

HANGING TYPES

No. 540 — Open-box reflector sprayed white; 500 watt; asbestos leads; chain hangers; grooves for color frame **$18.70**

No. 546 — Parabolic boxed Alzak aluminum reflector; 500 watt; asbestos leads; grooves for color frames; pipe clamp hanger.....**$28.60**

KLIEGL SPOTLIGHTS

FRESNEL LENS TYPES

Equipped with refracting prismatic Fresnel type lens — producing a soft-edge high intensity light beam. Accommodate standard concentrated filament incandescent lamps. Adjustable lamp carriage for focusing. Alzak aluminum reflectors. Slide grooves for color frames.


No. 43N3-A


No. 43N6-A


No. 43N16-CR

Cat. No.	Watts	Lens Dia., Inches	Price Each
43N3-A	100	3	$13.20
43N6-A	500	6	21.00
43N8-CR	1000	8	90.30
43N12-CR	2000	12	128.70
43N16-CR	5000	16	218.50

Nos. 43N3 and 43N6 normally supplied with extension cord, attachment plug and wall bracket, but may be had with suspension mounting, or table base at same price; or No. 43N6 on floor stand 25 ft. cord and switch at **$10.50** additional cost.

Nos. 43N8-CR–43N16-CR are supplied mounted on telescopic floor stand with rubber tired casters; furnished with 25 ft. cable and switch.

Suffix to Cat. No.: "E" pipe clamp, "A" wall bracket, "B" table base; "C" floor stand; "CR" roller stand.

PLANO CONVEX LENS TYPES

Standard general utility spotlights with the usual clear-glass condensing lens, designed for use with concentrated filament lamps. Sliding lamp carriage adjustable for focusing. Any type of mounting desired—pipe clamp, wall bracket, table base, or telescopic floor stand.


No 53*


No. 6N19


No 70

No. 53E — 250/400 watt, 4½" lens, short range (15-ft.), medium-screw-base receptacle, pipe clamp*. Price, ...**$16.50**

No. 5310E — 250/400 watt, 4½" lens, medium range (25-ft.), medium - screw - base receptacle, pip clamp*. Price, ...**$19.80**

No. 70-E—1000 w., 6" lens, average range (50 ft.), mogul prefocus receptacle, Alzak aluminum reflector, pipe clamp*. Price, **$45.10**

No. 6N19—2000 watt, 6" lens, average range (50 ft.), mogul prefocus receptacle, Alzak aluminum reflector, floor stand. Price, ...**$88.00**

No. 8N20—20000 watt, 8" lens, long range (100 ft.), mogul prefocus receptacle, Alzak aluminum reflector, floor stand. Price, ...**$115.50**

*Wall bracket or table base same price. Floor stands at slight additional cost. Floor stand models furnished with 25 ft. cable, otherwise short leads supplied.

ARC-LAMP TYPES

Standard lights, with plano-convex condensing lens. Hand-feed arc spots. Provided with external focusing and arc feed control. Hand grip for directional movement. Arc ballast resistance on stand. Enclosed line switch. 25 ft. of cable.


No 11

Cat. No.	Amps.	Lens Diam. Inches	Price Each
10	50	6	$184.00
11	70	6	224.25
18	70	8	241.50

KLIEGL PICTURE LIGHTS


No 276 AA

PROJECTOR TYPES

Fitted with objective lens system and adjustable framing shutters, permitting confinement of light within picture area.

Cat. No.	Lamp Watts	Type of Lamp	Price Each
276	75 or 100	G16½ Bayonet Base	$26.40
276AA	100	P25 Med. Screw Base	$33.00
	250 or 400	G30 Med. Screw Base	

KLIEGL SOLDERLESS LUGS


No. 450 Fig. 1 Fig. 2 Fig. 3

Stamped copper, require no soldering. Used whenever terminals are exposed to excessive heat; e.g., connecting asbestos-covered leads to arc lamp receptacles, etc.

Cat. No.	For Cable Size No.	Amps.	Price Per 100
450	10 or 12	25	$6.60
460	8 or 6	50	8.80
461	4 or 2	100	13.20
459	1	150	27.50

KLIEGL FLOODLIGHTS

INDOOR UNITS


No 1591

General-service-lamp type units: Alzak aluminum reflector, diffusing glass roundel in hinged holder; universal mounting, wall bracket, extension cord and attachment plug.

No. 1591—for 150-watt A25 med. sc. base....**$11.00**
No. 1592—for 200-watt PS-30 med. sc. base **14.30**
No. 1593—for 500-watt PS-40 mog. sc. base **18.50**


No. 533-A

Spot-lamp-type units: Alzak aluminum reflector, swivel mounting, wall bracket, asbestos leads. With or without color frame attachment, as indicated.

No. 531—for 250 watt G30 medium screw base lamp; without color frames. Price, ...**$12.10**

No. 533-A—for 250 watt G30 medium screw base lamp; with slide grooves and color frame....**$22.00**

OUTDOOR (WEATHERPROOF) UNITS


No 1602

Closed-front types: Concentrated beam. Curved glass front lens, with water-tight gasket and retaining ring. Polished Alzak aluminum reflector, adjustable mounting, short length of rubber-covered cable. Accommodates standard general service lamps.

No. 1601—150 watt, 8″ diameter front.....**$11.55**
No. 1602—200 watt, 12″ diameter front..... **15.95**
No. 1603—300/500W., 14″ diameter front.. **29.70**
No. 1605—750/1000W., 16″ diameter front **40.70**

Colored and spread lenses for above also available.

KLIEGL COLOR WHEELS


No 22


No 31

Hand Operated

Cat. No.	Lens Diam. Inches	No. of Colors	Lens Size* Inches	Price Each
14	13½	5	4½	$3.85
22	18	5	5 or 6	6.60
24	20	7	5 or 6	9.90
23	24	5	8	14.30

Motor Operated†

14AC	15⅜	6	4½	20.90
31AC	20	6	5 or 6	39.60
35AC	24	5	8	44.00

*For Spotlights.
†A-C. motors. Also can be furnished with D-C. motors—prices on application.

STANDARD COLOR GELATINES

Conventional Gelatine, 20″ x 24″ sheets.
Price, ...per sheet **$0.18**

KLIEGL DIMMERS


No 1237

Cat. No.	Watts	Size Inches	Price Each
1229	150	8	$23.10
1230	250	8	23.10
1231	400	8	23.10
1233	550	8	23.10
1234	650	8	23.10
1235	750	13	36.30
1236	1000	13	36.30
1237	1350	13	36.30
1238	1650	15½	49.50
1239	2000	15½	49.50
1240	2450	18	58.00
1241	2700	18	58.00
1242	3000	18	60.50

RODALE FIXTURE FITTINGS

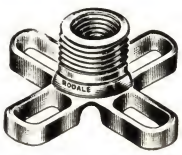
ADJUSTABLE CEILING UNIT CROSS BAR



A labor saving device which is adjustable to fit many different size canopies up to 7 inches wide. It has a vertical sliding adjustment with a graduated rule. Standard package, 500.

Price, No. **F-8** Cross Bar.....each **$0.16**

FIXTURE STUD



Aluminum alloy fixture stud threaded, ⅜ inch male thread outside; ⅛ inch inside.

Carton, 50; standard package, 500. Weight, 15 lbs.

Price, No. **F-6** Fixture Stud.....per 100 **$11.00**



FRENCH BRACKET STRAP

A labor saving device for hanging wall brackets. Made in 2 sizes: ⅛-inch thread; ⅛-inch and ⅜-inch combined. Standard package, 500; weight 25 pounds. Price is per 100.

Price, No. **F-7** Bracket Strap, ...per 100 **$12.00**

PLAIN BRACKET STRAP



Without French hook. Very handy for miscellaneous wiring on brackets, etc. Made ⅛-inch thread only.

Per 100
Price, No. **F-12** Bracket Strap.....**$5.00**

T & B RIGID CONDUIT FITTINGS

DISCONNECT HANGER ASSEMBLY

Listed Under Reexamination Service of Underwriters' Laboratories



These Hangers provide a safety disconnect for light and power circuits. Designed primarily for Mercury Vapor Lighting Units, they can be used equally well with other types of industrial lighting fixtures.

Each Hanger consists of a Locking Hook with 10-amp., 250-volt polarized receptacle and a Bushed Loop. Made of tough malleable iron, they support the fixture or pendant outlet and cannot be unhooked until the plug is out and the fixture "dead." The plug closes the hook so the loop cannot be removed while the plug is in place.

To unhook for either cleaning the fixture or replacing burnt out bulbs, simply pull out plug and lift the loop over the open hook.

The loops have standard ½-inch or ¾-inch female threads. They are easily transformed to the same size male threads by use of a close nipple.

Cat. No.	Description	Std. Pkg.	Wt. Lbs. Per 100	Price Each
6140	Complete Assembly	10	100	**$8.80**

SEPARATE PARTS

Cat. No.	Thread Size	Description	Std. Pkg.	Wt. Lbs. Per 100	Price Each
		Hooks for Use with Loops Listed Below			
6150	½"	2-w. receptacle ..	10	90	**$ 8.00**
6151	¾"	2-w. receptacle ..	10	95	**8.80**
6152	½"	3-w. receptacle ..	10	115	**16.80**
6153	¾"	3-w. receptacle ..	10	120	**17.60**
		Loops for Use with Hooks Listed Above			
785	½"	Non-cushion	10	20	**.95**
786	¾"	Non-cushion	10	30	**1.60**
805	½"	3– 6 lbs. cushion	10	45	**5.90**
806	½"	6–12 lbs. cushion	10	45	**6.40**
807	½"	12–24 lbs. cushion	10	45	**6.90**

ADALET SELF-ALIGNING COVERS

For installations where plumb alignment and flexible suspension of fixtures are desirable.



Type SA-342

The No. SA-342 ball joint allows the fixture to swing through an angle of 20 degrees in any direction of the perpendicular. Made of stamped steel. Has two sets of supporting screw hole centers for 3¼ and 4-inch outlet boxes and tapped ½-inch pipe size for fixture stem.

Cat. No.	Unit Pkg.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
SA-342	25	100	44	**$0.55**

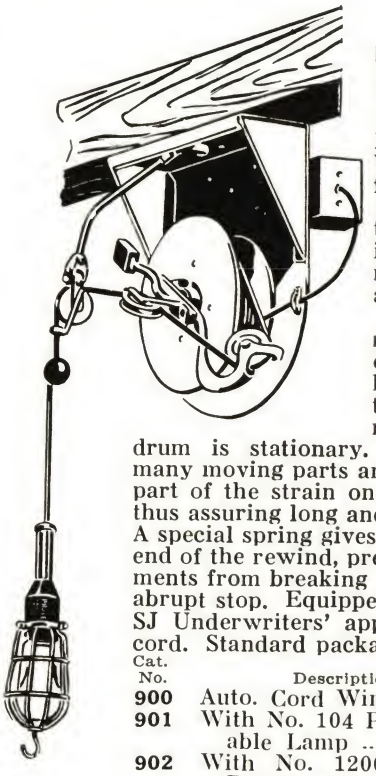
JACMIN GARAGE TROUBLE LAMPS



Equipped with two side receptacles for portable tools, etc. "Non-Slip" rubber handle. New type guard with full length rugged reflector. No dangerous sharp corners. Unconditionally guaranteed to give perfect service. .300 OD High Duty type rubber cord.

Cat. No.	Cord Lgth. Ft.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
JG 20	20	25	52	**$2.20**
JG 25	25	25	54	**2.40**
JG 50	50	20	65	**3.50**

PRoTEX AUTOMATIC CORD WINDER



There are numberless operations where a special light is needed at intervals. The Protex Cord Winder is ideal for this purpose. It provides an extension light that is always within reach, instantly available for use.

The cord is permanently connected to the supply line, eliminating the need of a commutator feed. The drum is stationary. This eliminates many moving parts and relieves a great part of the strain on the large spring, thus assuring long and trouble-free life. A special spring gives cushioned stop at end of the rewind, preventing lamp filaments from breaking under shock of an abrupt stop. Equipped with 40 ft. type SJ Underwriters' approved all rubber cord. Standard package, 1.

Cat. No.	Description	List Each
900	Auto. Cord Winder only....	**$98.00**
901	With No. 104 Protex Portable Lamp	**103.10**
902	With No. 1200 Vaprotex Portable Lamp	**112.80**

PRoTEX PORTABLE LAMPS

PRoTEX RUBBER HANDLES ONLY



No. 1173



No. 1174

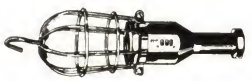


No. 1175

A high grade, oil resisting rubber handle in three types to fit all Protex guards.

Cat. No.	Description	Std. Pkg.	Price Each
1173	Protex Handle	30	**$2.00**
1174	Protex Handle for Key Socket	30	**2.30**
1175	Protex Handle with Side Outlet	30	**3.40**

No. "500" LINE PORTABLE HAND LAMPS



A Portable Hand lamp for the average user. Made in all popular sizes, 25 to 100 watts.

Consists of heavy duty guard, bakelite weatherproof socket and heavy rubber handle.

	No Reflector				With Reflector			
Watts	Closed End	Price Each	Open End	Price Each	Closed End	Price Each	Open End	Price Each
60	**500**	**$2.35**	**508**	**$2.40**	**504**	**$2.60**	**512**	**$2.65**
25-40	**501**	**2.30**	**509**	**2.35**	**505**	.....	**513**	.....
75-100	**502**	**2.40**	**510**	**2.45**	**506**	**2.65**	**514**	**2.70**

Equipped with Cord and Cap

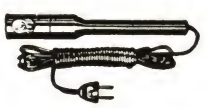
No. **523** Consists of No. 500 with 25 ft. of No. 18-2SJ cord and cap..... **$5.45**

No. **524** Consists of No. 500 with 25 ft. of No. 18-2S cord and cap..... **6.95**

For additional lengths of cord add to list: #18-2SJ, **$0.12** per ft.; /18-2S, **$0.18** per ft.

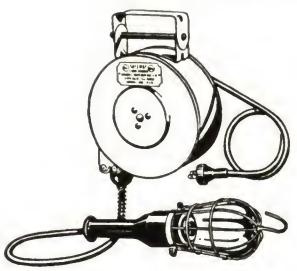
MINIATURE INSPECTION LIGHT

Oil-proof handle and cord set with removable fibre guard. Ideal when servicing business machines, etc. Operates on 110 volt.



Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.	Price Each
611	7-watt Inspection Light	5	50	30	**$3.30**
612	15-watt Inspection Light	5	50	31	**4.90**

SAFEWAY CORD REEL



Available in two lengths, 25 ft. and 45 ft. Uses No. 16-2 SJ Neoprene cord. Oversize spring and bearings with roller outlet for smooth, easy operation. Listed without Portable Hand Lamp.

Cat. No.	Description	Carton	Std. Pkg.	Pkg. Wt.	Price Each
1925	25 ft. Reel—no unit	2	6	52	**$35.00**
1945	45 ft. Reel—no unit	2	6	75	**45.00**

SAFEWAY LO-VOLTAGE PORTABLE



The ultimate in portable lighting units where electrical hazards exist due to dampness. A step down transformer is inserted in the line resulting in a low secondary voltage that assures the user of complete safety regardless of moisture conditions. Complete unit is made from NEOTEX synthetic rubber including cord, transformer cover, handle and plug cap. Oil, grease, most chemicals will not affect the unit. Available in longer secondary lengths than listed and also available with vaporproof or non-vaporproof handle.

Transformer capacity, 75 watts. Voltage: Primary, 110; secondary, 6. 110, 60 cycle; 1 in a standard package.

Wired Complete with PRoTEX Unit

Cat. No.	Length, Feet: Primary	Secondary	Reflector	Wt. Lbs. Each	Price Each
1600	10	20	no	12	**$80.20**
1601	10	20	yes	12	**81.10**

Wired Complete with VAPRoTEX Unit with Steel Guard

Cat. No.	Length, Feet: Primary	Secondary	Sealing Gland	Wt. Lbs. Each	Price Each
1620	10	20	no	14	**$90.80**
1621	10	20	yes	14	**92.60**

Wired Complete with VAPRoTEX Unit with Aluminum Guard

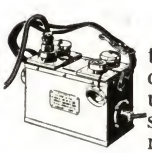
1630	10	20	no	14	**$103.95**
1631	10	20	yes	14	**105.75**

Additional cable lengths are obtainable within the output capacity of the transformer.

While only the 110 to 6 volt stepdown is listed, other combinations are available: 110 to 12 volts, 110 to 32 volts, 220 to 6 volts, 200 to 12 volts and 220 to 32 volts.

All Lo-Volt transformer units come equipped with 50-watt lamps.

SAFEWAY 4-WAY LOVOLT



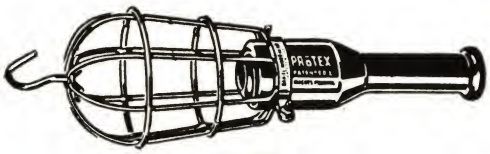
Low voltage protection for more than one operator. Four light units can be used simultaneously. Individually fused circuits, watertight construction. Listed complete with primary cord only.

Secondary cord sets available on request. Size depends on secondary voltage.

Cat. No.	Description	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
1640	4-Way Lovolt	1	40	**$335.00**

PRoTEX PORTABLE LAMPS

PRoTEX RUBBER HANDLE PORTABLE LAMPS



No. 100

Protex Portable Lamps are designed to meet exacting safety requirements. The handle is made of oil-proof synthetic Neotex rubber; socket is of molded rubber and is watertight; guard is made of heavy steel wire, spot-welded at all joints and heavily cadmium-plated to prevent rusting. These lamps include handle, socket and guard with hook, and are supplied with or without reflector.

		No Reflector			With Reflector		
Watts	Std. Pkg.	Closed End	Open End	Price Each	Closed End	Open End	Price Each
60	30	**100**	**108**	**$4.20**	**104**	**112**	**$5.10**
25-40	30	**101**	**109**	**3.95**	**105**	**113**	--------
100	30	**102**	**110**	**4.50**	**106**	**114**	**5.40**
200	30	**103**	**111**	**7.30**	**107**	**115**	**8.70**
60	12	†**123**	.....	**13.85**	------	------	------

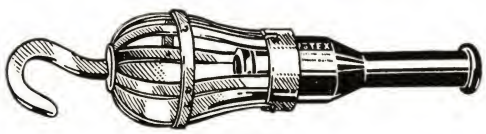
If Hook is not desired, so specify, and deduct **$0.25** from list price. If Ground Clip is desired, so specify, and add **$0.50** to list price. If Key Socket is desired, specify so, and add **$0.80** to list price.

If rubber covering is required on Protex Guards, add letter "I" to catalog number and add to list **$3.50**.

†Consists of No. 100 Portable Lamp, 25 feet No. 18-2 conductor, Type S Heavy Duty, Underwriters' Approved, all-rubber cord and Safeway Heavy Duty Rubber Plug. For additional lengths of cord on No. 123 add to list **$0.35** per ft.

RUBBER HANDLE PORTABLE LAMPS

With Fibre Insulated Guards



No. 117

Consists of rubber handle, keyless socket and screwless type closed end, fibre guard with hook and with or without reflector.

Cat. No.	Description	Lamp Watts	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
117R	With Reflector	75	30	35	**$7.25**
117	No Reflector	75	30	34	**6.75**
118R	With Reflector	60–100	30	37	**8.50**
118	No Reflector	60–100	30	36	**7.95**

RUBBER HANDLE PORTABLE LAMPS

With Bakelite Insulated Guards

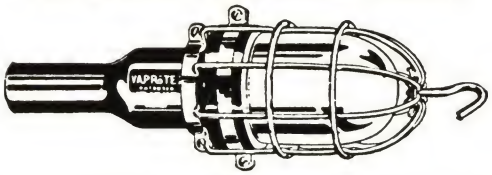


No. 119

Sturdy molded bakelite construction. Designed for applications where insulation and small size is necessary.

Cat. No.	Description	Lamp Watts	Wt. Lbs. Std. Pkg.	Std. Pkg.	Price Each
119	No Reflector	25-40	30	36	**$7.70**
120	With Reflector	25-40	30	38	**8.20**

VAPRoTEX PORTABLE LAMPS



Recommended for illumination purposes where gas, dust and other explosives exist. When properly assembled they may be used in the most hazardous locations with absolute safety. Lamps include synthetic rubber Neotex handle, Neotex socket, heat and temperature-resisting glass globe and with steel wire or aluminum guard.

		With Steel Wire Guards			With Non-Sparking Aluminum Guards		
Watts	Std. Pkg.	Cat. No.	Pkg. Wt.	Price Each	Cat. No.	Pkg. Wt.	Price Each
60-75	12	**1200**	36	**$14.80**	**1204**	44	**$27.95**
100	12	**1201**	38	**16.00**	**1205**	48	**30.15**
60-75	12	***1202**	40	**16.60**	***1206**	46	**29.75**
100	12	***1203**	42	**17.80**	***1207**	51	**31.95**

*With stuffing box in handle.

Ground clip for third wire for any of above, type "CLIP," **$0.50** list each.

Vaprotex Wire Guards with Rubber Covering—If desired, specify the letter (I) after any of the above wire guard types and add **$5.25**.

GLASS GLOBES ONLY

For Vaprotex Portable Lamps

Cat. No.	Description	Watts	Std. Pkg.	Pkg. Wt.	Price Each
1252	Heat-Resisting Glass	60–75	12	14	**$3.50**
1253	Heat-Resisting Glass	100	12	18	**3.90**

VAPRoTEX BUNGHOLE LAMPS



No. 1300



No. 1301

The Vaprotex Bunghole Lamp is a vaporproof lighting unit for inspecting gasoline, oil, chemical and other drums used for explosives. Made of non-sparking metal throughout. Regularly furnished with a 15-watt, 120-volt Mazda lamp. Equipped with high heat-resisting glass globes. Can be had with spear if desired.

Cat. No.	Watts	Lgth. Inches	Outside Diam.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
1300	15	30	1½	1	4	**$34.00**
1301	15	12	1½	1	3	**29.00**

PRoTEX BUNGHOLE LAMP



A non-vaporproof lighting unit for inspecting beer, lard, syrup and other barrels used for non-explosive solutions. Furnished with a 15-watt, 120-volt Mazda lamp.

It is exceptionally suitable for use in brewery wash-houses as pieces of bung and other foreign matter can be removed from barrels by spear.

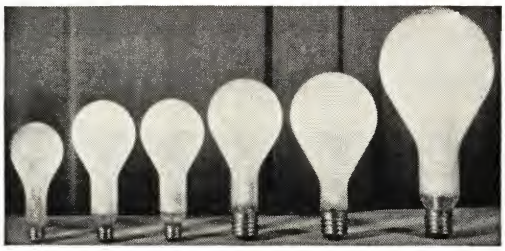
Cat. No.	Watts	Lgth. Inches	Outside Diam.	Std. Pkg.	Wt. Lbs. Std. Pkg.	Price Each
1302	15	30	1	1	3	**$26.00**

None of the above prices includes cord and plug, but these items can be furnished assembled to the lamps, either 2 or 3 conductor cord, at additional costs, furnished upon application.

GENERAL ELECTRIC LAMPS



15W 25W 40W 50, 60 75W 100W 150W



150W 200W 300W (Med.) 300W (Mog.) 500W 750W 1000W

115, 120, and 125 Volts

GENERAL ELECTRIC INSIDE FROSTED LAMPS

For most general lighting purposes. Inside frosting diffuses the light and helps eliminate shadows and glare. Light output is practically the same as for clear lamps. Outside surface is smooth and easily cleaned.

Watts	Bulb	Base	Max. Over-all Lgth. Inches	Lamp Ordering Abbrev. (Exc. Volts)	Std. Pkg. Qty.	*List Price
15	A-15	Med.	3½	15A15	120	$0.13
25	A-19	Med.	3 15/16	25A	120	.13
40	A-19	Med.	4¼	40A	120	.14
50	A-19	Med.	4 7/16	50A	120	.14
50	†GA-25	Med.	4 7/16	50GA	60	.40
60	A-19	Med.	4 7/16	60A	120	.14
75	A-19	Med.	4 7/16	75A	120	.16
100	A-21	Med.	5 5/16	100A	120	.16
150	PS-25	Med.	6 15/16	150	60	$0.20
†150	R-40	Med.	6⅛	150R/W	24	1.05
200	PS-30	Med.	8 1/16	200/IF	60	.27
300	PS-30	Med.	8 1/16	300M/IF	60	.40
300	PS-35	Mog.	9⅜	300/IF	24	.70
500	PS-40	Mog.	9¾	500/IF	24	1.00
750	PS-52	Mog.	13 1/16	750/IF	6	3.05
1000	PS-52	Mog.	13 1/16	1000/IF	6	3.30

† Decorative enamel bowl.

† White Indirect-Lite.

G-E DAYLIGHT LAMPS (115-125 Volts)

Produce light approximating daylight. Used where color discernment is important.

60	A-19 I.F.	Med.	4 7/16	60A/D	120	.25
100	A-23 I.F.	Med.	6 1/16	100A/D	120	.30

G-E CLEAR LAMPS

Used in enclosed diffusing equipment or shielded reflectors which protect the eyes from glare.

150	PS-25	Med.	6 15/16	150/CL	60	$0.20
200	PS-30	Med.	8 1/16	200	60	.27
300	PS-30	Med.	8 1/16	300M	60	.40
300	PS-35	Mog.	9⅜	300	24	.65
500	PS-40	Mog.	9¾	500	24	.95
750	PS-52	Mog.	13 1/16	750	6	2.90
1000	PS-52	Mog.	13 1/16	1000	6	3.10
1500	PS-52	Mog.	13 1/16	1500	6	4.75

DISCOUNT SCHEDULE

TO PURCHASERS WITHOUT CONTRACT

Minimum List Value for Immediate Delivery to One Point:	Discount
Less than $5.00	0%
$ 5.00	20%
$15.00 (Less than a Standard Package)	25%
An order including at least one Standard Package	30%

A standard package of large lamps is defined as a package, as packed by the manufacturer, of that "Standard Package Quantity" designated for each lamp in the manufacturer's price schedule, and the lamps in such a standard package may not be of different specifications.

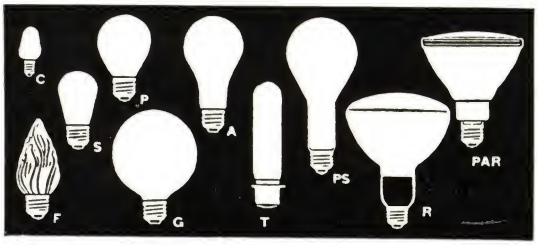
To Purchasers Under Form E Contract			Discount for Immediate Delivery to One Point		
Basis (Net Value of Purchases) of Form E Contract.	$ 600	On a purchase of $15 or more list value or on a purchase of less than $15 list value which includes a standard package.	32%	On purchases of broken packages amounting to less than $15 list value.	27%
	1,500		33%		28%
	3,500		34%		29%
	7,500		35%		30%
	15,000		36%		31%
	20,000		37%		32%
	35,000		38%		33%
	65,000		39%		34%
	100,000		40%		35%
	150,000		41%		36%
	200,000		42%		37%

HOW TO ORDER

Order by Lamp Ordering Abbreviations. Correct voltage must be specified except for Series, Fluorescent, Sun, Mercury, Glow, Miniature and Photo Lamps. For lamps not specifically listed specify Size, Volts or Amps, Bulb, Base, Finish and Service.

BULB SHAPES

C – Cone
S – Straight side
P – Pear shape
F – Flame shape
G – Globe shape
T – Tubular
R – Reflector shape
PS – Pear straight neck
A – Standard line
PAR – Parabolic

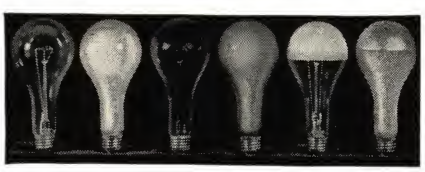


BULB DESIGNATIONS

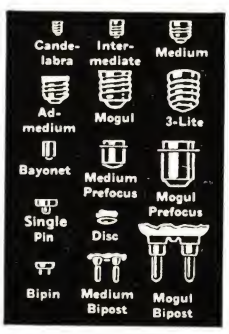
The letter in a bulb designation indicates its shape and the figure indicates its approximate diameter in eighths of an inch. Thus, a G-25 is a globular bulb approximately 3⅛ inches in diameter.

BULB FINISHES

Clear Inside Frosted | Clear Daylight | Frosted Daylight | White Bowl | Silvered Bowl



BASE TYPES

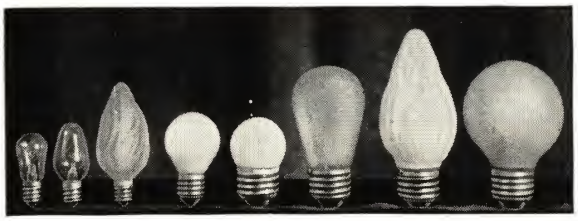


* List Prices do not include Federal Excise Tax.

GENERAL ELECTRIC LAMPS

115, 120, 125 Volts Unless Otherwise Noted

G-E SIGN AND DECORATIVE LAMPS



6S6 7C7 15F10 10S11 7½S11 10S14 25F15 25G18½

Inside colored (I C.) lamps are particularly adaptable to exposed lamp signs and colorful displays. Outside coated (O C) flameshape and round bulb lamps are used where the bulb shape is related to the artistic design of the luminaire.

Watts	Bulb and Finish	Base	Lamp Ordering Abbrev. (Exc. Volts)	Std. Pkg. Qty.	*List Price
6	S-6 Clear	Cand.	6S6	240	$0.16
7	C-7 Clear	Cand.	7C7	240	.12
7	C-7 White (Nite Light)	Cand.	7C7/W	240	.14
7	C-7 O. C. Red	Cand.	7C7/R	240	.13
10	S-11 Clear	Inter.	10S11N	120	.16
10	S-11 White	Inter.	10S11N/CW	120	.21
7½	S-11 O. C. White	Med.	7½S/W	120	.16
7½	S-11 O. C. Red	Med.	7½S/R	120	.16
10	S-14 Clear	Med.	10S14	120	.15
10	S-14 I. F.	Med.	10S14/IF	120	.15
25	A-19 Colored②	Med.	25A/①	120	.18
60	A-19 Yellow	Med.	60A/Y	120	.19
100	A-21 Yellow	Med.	100A21/61Y	120	.26

① Substitute color symbol in place of ① in ordering abbreviation, thus: 25A/B.

② Colors: blue (B), flametint (FT), green (G), ivory (V), orange (O), red (R), rose (R2), and yellow (Y).

15	F-10 O. C.①	Cand.	15FC/①	60	$0.22
25	F-15 Clear	Med.	25F	120	.18
25	F-15 O. C.①	Med.	25F/①	120	.18
25	G-18½ O. C. White	Med.	25G18½/W	120	.30
40	G-25 O. C. White	Med.	40G/W	60	.35

Outside coated lamps not recommended for outdoor use.

① Colors: flametint (FT), white (W), ivory (V). Substitute color symbol in place of ① in ordering abbreviation, thus: 15FC/V.

G-E THREE-LITE LAMPS

Give three levels of lighting. Used generally in table and floor lamps. Three contact bases.

30 70 100	A-21 I. F.	Med.	30/100	120	$0.30
50 100 150	PS-25 I. F.	Med.	50/150M	60	.36
50 100 150	PS-25 I. F.	Mog.	50/150	60	.48
50 100 150	R-40 White	Med.	50/150R/W	24	1.15
100 200 300	G-30 White	Mog.	100/300	60	.60



50/150

G-E COUNTRY HOME LAMPS

(30 Volts)

15	A-17 I. F.	Med.	15A	120	$0.20
25	A-19 I. F.	Med.	25A	120	.20
50	A-21 I. F.	Med.	50A21	120	.20
100	A-23 I. F.	Med.	100A	120	.33

*** List Prices do not include Federal Excise Tax.**



GENERALELECTRIC LUMILINE LAMPS

These lamps provide continuous lines of clear or colored light of low brightness. They are ideally suited to modern decorative concepts for built-in illumination or applied decoration; for displays, niches, mirrors, and the like.

Watts	Bulb and Finish	Base	Max. Over-all Length, Inches	Lamp Ordering Abbrev. (Exc. Volts)	Std. Pkg. Qty.	*List Price
40	T-8 Clear	Disc	11¾	L40	24	$1.05
40	T-8 I. F.	Disc	11¾	L40/IF	24	1.10
40	T-8 White	Disc	11¾	L40/W	24	1.10
40	T-8 Straw	Disc	11¾	L40/ST	24	1.10
60	T-8 Clear	Disc	17¾	L60	24	1.20
60	T-8 I. F.	Disc	17¾	L60/IF	24	1.25
60	T-8 White	Disc	17¾	L60/W	24	1.25
60	T-8 Straw	Disc	17¾	L60/ST	24	1.25

G-E SILVERED BOWL LAMPS

Used with indirect lighting equipment. Have inside frosted bulb with coating of mirrored silver on the bowl.

60	A-19	Med.	4 7/16	60A/SB	120	$0.28
100	A-23	Med.	6 1/16	100A/SB	120	.30
150	PS-25	Med.	6 15/16	150/SB	60	.45
200	PS-30	Med.	8 1/16	200/SBIF	60	.67
300	PS-35	Mog.	9⅜	300/SBIF	24	1.20
500	PS-40	Mog.	9¾	500/SBIF	24	1.70

G-E INSIDE WHITE BOWL LAMPS

White enamel coating redirects about 80% of light upwards. Used in open type direct lighting fixtures.

150	PS-25	Med.	6 15/16	150/WB	60	$0.25
200	PS-30	Med.	8 1/16	200/WB	60	.32
300	PS-35	Mog.	9⅜	300/WB	24	.70

G-E WHITE LAMPS

Gives almost perfect light diffusion, is clean and white in appearance — ideal for reading lamps.



100	A-21	Med.	5 5/16	100A/W	120	$0.21

G-E APPLIANCE LAMPS



T7 T8

Candelabra Screw Base

10	C-7 Clear	2⅛	10C7	240	$0.13

D. C. Bayonet Candelabra Base

10	C-7 Clear	2 3/16	10C7DC	120	$0.14
15	T-7 Clear	2⅝	15T7DC	60	.25
25	T-8 Clear	2⅝	25T8DC	60	.25

Medium Screw Base

40	A-15 I.F.	3¾	40A15/1	120	$0.15
40	A-15 Clear	4	40A15/22	120	.25

GENERAL ELECTRIC LAMPS

G-E GENERAL LINE FLUORESCENT LAMPS

Lower wattage fluorescent lamps, 6 to 20 watts, are used for showcases, niches, bed lamps, etc., where space is small or where low amounts of light are desired. Higher wattage lamps, 30 to 85 watts are used in homes, stores, offices, industrial plants and other applications of general lighting.

F14T12
F15T8
F15T12
F20T12
F30T8
F40T12
F85T17



Bulb	Nom. Lamp Watts	Color♦	Lamp Ordering Abbrev.	Std. Pkg. Qty.	*List Price
Miniature Bipin Base					
9″—T-5 (⅝″ diam.)	6	Standard Cool Wh.	F6T5/CW	24	$0.80
		White	F6T5/W	24	.80
		Daylight	F6T5/D	24	.80
12″—T-5 (⅝″ diam.)	8	Standard Cool Wh.	F8T5/CW	24	.90
		White	F8T5/W	24	.90
		Daylight	F8T5/D	24	.90
21″—T-5 (⅝″ diam.)	13	Standard Cool Wh.	F13T5/CW	24	1.00
		White	F13T5/W	24	1.00
Medium Bipin Base					
15″—T-12 (1½″ diam.)	14	Standard Cool Wh.	F14T12/CW	24	.80
		Standard Warm Wh.	F14T12/WW	24	.80
		White	F14T12/W	24	.80
18″—T-8 (1″ diam.) ①	15	Standard Cool Wh.	F15T8/CW	24	.65
		De Luxe Cool Wh.	F15T8/CWX	24	†
		Standard Warm Wh.	F15T8/WW	24	.65
		De Luxe Warm Wh.	F15T8/WWX	24	†
		White	F15T8/W	24	.65
		Daylight	F15T8/D	24	.65
		Soft White	F15T8/SW	24	.75
18″—T-12 (1½″ diam.)	15	Standard Cool Wh.	F15T12/CW	24	.80
		De Luxe Cool Wh.	F15T12/CWX	24	†
		Standard Warm Wh.	F15T12/WW	24	.80
		De Luxe Warm Wh.	F15T12/WWX	24	†
		White	F15T12/W	24	.80
		Daylight	F15T12/D	24	.80
		Soft White	F15T12/SW	24	.90
24″—T-12 (1½″ diam.) ①	20	Standard Cool Wh.	F20T12/CW	24	.80
		De Luxe Cool Wh.	F20T12/CWX	24	†
		Standard Warm Wh.	F20T12/WW	24	.80
		De Luxe Warm Wh.	F20T12/WWX	24	†
		White	F20T12/W	24	.80
		Daylight	F20T12/D	24	.80
		Soft White	F20T12/SW	24	.90
36″—T-8 (1″ diam.) ①	30	Standard Cool Wh.	F30T8/CW	24	.80
		De Luxe Cool Wh.	F30T8/CWX	24	†
		Standard Warm Wh.	F30T8/WW	24	.80
		De Luxe Warm Wh.	F30T8/WWX	24	†
		White	F30T8/W	24	.80
		Daylight	F30T8/D	24	.80
		Soft White	F30T8/SW	24	.90
48″—T-12 (1½″ diam.) ①	40	Standard Cool Wh.	F40T12/CW	24	1.00
		De Luxe Cool Wh.	F40T12/CWX	24	1.15
		Standard Warm Wh.	F40T12/WW	24	1.00
		De Luxe Warm Wh.	F40T12/WWX	24	1.15
		White	F40T12/W	24	1.00
		Daylight	F40T12/D	24	1.00
		Soft White	F40T12/SW	24	1.05
48″—T-12 (1½″ diam.)	40	Std. Cool Wh. ②	F40T12/CW/IS	24	1.10
		Std. Warm Wh. ②	F40T12/WW/IS	24	1.10
		Soft White ②	F40T12/SW/IS	24	1.20
Mogul Bipin Base					
60″—T-17 (2⅛″ diam.)	40	Standard Cool Wh. ②	F40T17/CW/IS	12	$2.45
60″—T-17 (2⅛″ diam.)	85	Standard Cool Wh.	F85T17/CW	12	2.45
		Standard Warm Wh.	F85T17/WW	12	2.45
		White	F85T17/W	12	2.45
		Daylight	F85T17/D	12	2.45
		Soft White	F85T17/SW	12	2.65

G-E SLIMLINE FLUORESCENT LAMPS

(Instant Start—No Starters Used)

F96T8
F72T8
F64T6
F42T6



G-E Fluorescent lamps, ¾, 1 and 1½ inches in diameter, provide long slim lines of light and are greatly appreciated for their decorative value as well as for their lighting efficiency.

Bulb	Nom. Lamp Watts	Color♦	Lamp Ordering Abbrev.	Std. Pkg. Qty.	*List Price
Single Pin Base					
42″—T-6 (¾″ diam.) ①	17.5-32.5	Standard Cool Wh.	F42T6/CW	24	$1.60
		De Luxe Cool Wh.	F42T6/CWX	24	†
		Standard Warm Wh.	F42T6/WW	24	1.60
64″—T-6 (¾″ diam.) ①	25.5-48	Standard Cool Wh.	F64T6/CW	24	1.85
		De Luxe Cool Wh.	F64T6/CWX	24	†
		Standard Warm Wh.	F64T6/WW	24	1.85
72″—T-8 (1″ diam.) ①	24.5-48.5	Standard Cool Wh.	F72T8/CW	24	2.05
		De Luxe Cool Wh.	F72T8/CWX	24	†
		Standard Warm Wh.	F72T8/WW	24	2.05
		De Luxe Warm Wh.	F72T8/WWX	24	†
96″—T-8 (1″ diam.) ①	32-65	Standard Cool Wh.	F96T8/CW	24	2.75
		De Luxe Cool Wh.	F96T8/CWX	24	†
		Standard Warm Wh.	F96T8/WW	24	2.75
		De Luxe Warm Wh.	F96T8/WWX	24	†
48″—T-12 (1½″ diam.)	38	Standard Cool Wh.	F48T12/CW	24	1.45
		Standard Warm Wh.	F48T12/WW	24	1.45
72″—T-12 (1½″ diam.)	55	Standard Cool Wh.	F72T12/CW	12	2.65
		Standard Warm Wh.	F72T12/WW	12	2.65
96″—T-12 (1½″ diam.)	72	Standard Cool Wh.	F96T12/CW	12	3.30
		De Luxe Cool Wh.	F96T12/CWX	12	†
		Standard Warm Wh.	F96T12/WW	12	3.30
		De Luxe Warm Wh.	F96T12/WWX	12	†

G-E CIRCLINE FLUORESCENT LAMPS



Circline fluorescent lamps have wide use in residential floor and table lamps as well as in commercial and industrial applications.

4-Pin Base					
12″ Circline	32	Standard Cool Wh.	FC12T10/CW	12	$2.10
1¼″ Diam.	32	Standard Warm Wh.	FC12T10/WW	12	2.10

♦ All "Standard Cool White" listings were formerly "4500 White" all "Standard Warm White" listings were formerly "Warm Tint."

† Prices not available at time of going to press.

① Available in blue, green, pink, gold and red.

② For instant start service. No starters used.

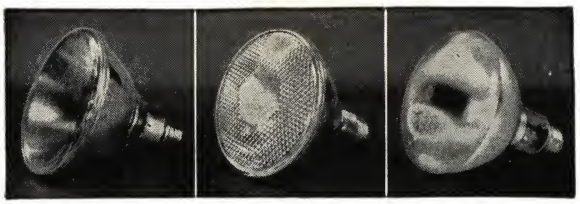
All G-E Fluorescent lamps are for multiple operation and should be used only with auxiliary equipment designed to produce proper electrical values. Lamps may be burned in any position.

*** List Prices do not include Federal Excise Tax.**

GENERAL ELECTRIC LAMPS

GENERAL ELECTRIC PROJECTOR AND REFLECTOR LAMPS

115, 120, and 125 Volts



Projector Spot Projector Flood Reflector

The Reflector Spot and Flood lamps provide, respectively, a concentrated beam for feature store and window displays, or a spread beam for floodlighting interiors and operations. Not for outdoor use.

The Projector Spot and Flood offer the same type of service. Being made of hard glass, they may be used indoors, or outdoors—wherever reflectors must be free from effects of weather, vapor, dust, and deterioration.

Watts	Bulb and Finish	Base	Lamp Ordering Abbrev. (Exc. Volts)	Std. Pkg. Qty.	*List Price
§GENERAL ELECTRIC PROJECTOR LAMPS					
†150	PAR-38	Med. Skt.	150PAR/SP	12	$1.55
†150	PAR-38	Med. Skt.	150PAR/FL	12	1.55
GENERAL ELECTRIC REFLECTOR LAMPS					
75	R-30 Light I.F.	Med.	75R30/SP	60	1.05
75	R-30 I.F.	Med.	75R30/FL	60	1.05
150	R-40 Light I.F.‡	Med.	150R/SP	24	1.05
†300	R-40 Light I.F.‡	Med.	300R/SP	24	1.55
150	R-40 I.F.‡	Med.	150R/FL	24	1.05
†300	R-40 I.F.‡	Med.	300R/FL	24	1.55

† Should be burned only in porcelain sockets.
§ Lamps are suitable for both outdoor and indoor use.
‡ May not give satisfactory performance if any accessory lighting equipment is attached to, or touches, the glass bulb.

G-E ROUGH SERVICE AND VIBRATION LAMPS

115, 120, and 125 Volts

This lamp withstands shock and bumps, such as received when used as a portable light on extension cord.

Watts	Bulb and Finish	Base	Max. Over-all Length, Inches	Lamp Ordering Abbrev. (Exc. Volts)	Std. Pkg. Qty.	*List Price
50	A-19 I.F.	Med.	$3\frac{15}{16}$	50A/RS	120	$0.25
100	A-23 I.F.	Med.	$6\frac{1}{16}$	100A/RS	120	.35

The Vibration lamp is designed to withstand high frequency vibration, as from high-speed machinery.

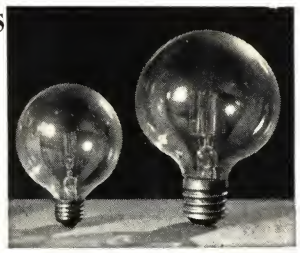
50	A-19 I.F.	Med.	$3\frac{15}{16}$	50A/VS	120	$0.20
100	A-23 I.F.	Med.	$6\frac{1}{16}$	100A23/28	120	.35

G-E HIGH VOLTAGE LAMPS (230 and 250 Volts)

25	A-19 I.F.	Med.	$3\frac{15}{16}$	25A	120	$0.18
50	A-19 I.F.	Med.	$3\frac{15}{16}$	50A	120	.18
100	A-23 I.F.	Med.	$6\frac{1}{16}$	100A	120	.24
200	PS-30 Cl.	Med.	$8\frac{1}{16}$	200	60	.50
200	PS-30 I.F.	Med.	$8\frac{1}{16}$	200/IF	60	.55
300	PS-35 Cl.	Mog.	$9\frac{3}{8}$	300	24	.85
500	PS-40 Cl.	Mog.	$9\frac{3}{4}$	500	24	1.40
750	PS-52 Cl.	Mog.	$13\frac{1}{16}$	750	6	3.50
1000	PS-52 Cl.	Mog.	$13\frac{1}{16}$	1000	6	3.75

FLOODLIGHT AND SPOTLIGHT LAMPS

115, 120, and 125 Volts



G-30 G-40

G-E Floodlight and Spotlight lamps are made with the filament concentrated into a small space and accurately positioned with respect to the base. They may be burned in any position from vertically base down to horizontal.

Watts	Bulb and Finish	Base	Lamp Ordering Abbrev. (Exc. Volts)	Light Center Length, Inches	Std. Pkg. Qty.	*List Price
FLOODLIGHT LAMPS						
250	G-30 Cl.	Med.	250G/FL	3	60	$1.40
500	G-40 Cl.	Mog.	500G/FL	$4\frac{1}{4}$	24	2.55
1000	G-40 Cl.	Mog.	1M/G40FL	$5\frac{1}{4}$	24	5.00
SPOTLIGHT LAMPS						
100	A-21 Cl.	Med.	100A21SP	3	120	1.05
250	G-30 Cl.	Med.	250G/SP	3	60	1.40
400	G-30 Cl.	Med.	400G/SP	3	60	1.90
1000	G-40 Cl.	Mog.	1M/G40SP4¼	$4\frac{1}{4}$	24	5.00

*** List Prices do not include Federal Excise Tax.**

G-E HAND LANTERN, FLASHLIGHT AND MARINE LAMPS

Lamp No.	Type	Amps. or Watts	Volts	Bulb	Base	Price Each
27	Lantern	.30A	4.9	G-4½	Min.Sc.	**$0.15**
31	Flashlight	.30A	6.15	G-4½	Min.Sc.	**.12**
1492	Lantern	1.50A	2.5	S-8	DC Bay.	**.55**
1602	Marine	.50A	1.3	S-8	DC Bay.	**.50**
1651	Lantern	.60A	5	S-8	SC Bay.	**.40**

Federal excise tax (6.3%) not included in list prices shown.

GENERAL ELECTRIC LIGHT METER



The new General Electric Light Meter is an instrument which measures light as easily as a thermometer measures temperature. The actual amount of light, together with the necessary amount for all types of seeing-tasks, may be measured.

In appearance the Light Meter resembles a thin, compact desk clock. It measures 2¼ inches square and 1⅛ inches thick and is made of Textolite with a mahogany finish.

Light Meters are equipped with a metal multiplying plate so that illumination values up to 1000 footcandles may be read.

Price, G-E Light Meter.....each **$11.50**

GENERAL ELECTRIC LAMPS



G-E INFRARED HEAT LAMPS †

115–125 Volts (Design Volts 115)

G-E Heat lamps provide penetrating heat that helps to relieve muscular aches and pains. Have many other uses in home and farm for quick drying and heating.

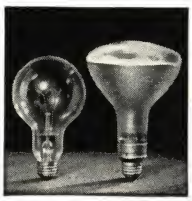
250R40/10

Watts	Bulb and Finish	Base	Lamp Ordering Abbrev. (Exc. Volts)	Std. Pkg. Qty.	List Price
250	R-40 Light I.F.	Med.	250R40/1	24	$1.10
•250	R-40 Red bowl	Med.	250R40/10	24	2.95

G-E INFRARED INDUSTRIAL LAMPS†

115-125 Volts (Design Volts 115)

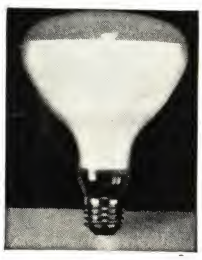
Radiation from G-E industrial lamps speeds drying and surface heating processes and facilitates today's trend toward straight-line, continuous-flow production.



G-30 R-40

Watts	Bulb and Finish	Base	Lamp Ordering Abbrev. (Exc. Volts)	Std. Pkg. Qty.	List Price
250	G-30 Clear	Md.Sk.	250G30	60	$0.80
250	R-40 Light I.F.	Md.Sk.	250R40/4	24	1.25
375	R-40 Light I.F.	Md.Sk.	375R40	24	1.50

G-E SUNLAMPS †



RS

Sunlamps are usually employed in portable-type lamps and fixtures for homes, offices and similar locations; in various types of farm units for irradiating animals and poultry and in Solaria.

RS. Type RS, is in a bulb with self-contained reflector, and operates directly from 50-60 cycle, 110-125 volt A.C. current with no auxiliary ballast required.

Watts	Bulb	Finish	Base	Lamp No.	Std. Pkg. Qty.	List Price
•275	R-40	I.F. Reflector	Med.	RS	6	$8.50

• The Schedule of Discounts to Purchasers Without Contract does not apply to this lamp. A discount of 30% of list will be allowed on noncontract purchases of one or more standard packages of this lamp, but no discount will be allowed on less than standard package quantities even if purchased with standard packages.

† Not subject to Federal Excise Tax.

G-E GERMICIDAL LAMPS †



Germicidal lamps transmit ultraviolet energy in wavelengths most effective in destroying bacteria and molds. They have wide application in hospitals, schools and other places where the control of air and surface bacteria is of greatest public concern. They are used also to provide sterile storage for foods, pharmaceuticals and other product protection. Germicidal lamps should be properly installed in correctly designed fixtures to give proper distribution of ultraviolet for air disinfection.

Watts	Bulb	Base	U-V Output Watts	Lamp Ordering Abbrev.	Std. Pkg. Qty.	List Price
15	T-8	Med. Bipin	2.9	G15T8	24	$4.50
30	T-8	Med. Bipin	7.2	G30T8	24	6.75
8	T-5	Min. Bipin	1.5	G8T5	24	4.25



T-6½ T-10 T-8

GENERAL ELECTRIC TUBULAR LAMPS*

115, 120, and 125 Volts

These low-wattage tubular lamps are for showcase lighting, in shallow-depth displays, and in small trough-like reflectors. The SHOWCASE REFLECTOR lamps have a built-in reflecting surface and a spring contact base for positioning.

Watts	Bulb	Base	Lamp Ordering Abbrev. (Exc. Volts)	Std. Pkg. Qty.	*List Price
25	T-6½ Clear	Inter.	25T6½	60	$0.38
25	T-10 Clear	Med.	25T10	60	.27
25	T-10 I. F.	Med.	25T10/IF	60	.30
25	T-10 Refl.(Lt. I.F.)	Med.	25T10/RFL	60	.85
40	T-10 Refl.(Lt. I.F.)	Med.	40T10/RFL	60	.85
40	T-8 Clear	Med.	40T8	24	.95
40	T-10 Clear	Med.	40T10	60	.33

G-E MERCURY LAMPS*

Higher lumens per watt efficiency give mercury lamps preference over filament-type lamps for certain lighting purposes. The yellowish-green light is emitted by an electric arc formed between two electrodes enclosed in a glass bulb. They require special transformers or regulating devices for starting and operation.



A-111

Approx. Lamp Watts	Bulb	Base	Lamp Number	Rated Average Life (Hrs.) ①	Std. Pkg. Qty.	*List Price
②400	T-16	Mog.	H400-A1	4000	12	$10.50
400	T-20	Mog.	H400-E1	3000	12	17.00
3000	T-9½	S.C. Term.	H3000-A9	5000	1	48.00

① Rated average life under specified test conditions, with 5 burning hours per start.

② Burn within 10° of vertical base up.

* List Prices do not include Federal Excise Tax.

† Not subject to Federal Excise Tax.

GENERAL ELECTRIC LAMPS

TRAIN AND LOCOMOTIVE

TRAINLIGHTING. To insure satisfactory lamp performance, voltage regulating devices should be adjusted to maintain rated lamp voltage at the socket. The 30- and 60-volt lamps are recommended as best adapted to average voltage conditions encountered in train-lighting service.

LOCOMOTIVE HEADLIGHT. Should be operated at rated voltage in headlight equipment protecting them from excessive vibration. The bulb must be protected from water which might strike it while hot.

The 250-watt lamp is designed for road locomotives. The 100-watt is recommended for switching locomotives.

LOCOMOTIVE CAB. This lamp designed for ruggedness rather than efficient light production. For all locomotive lighting purposes except headlighting.

Watts	Bulb and Finish	Base	Lamp Ordering Abbrev. (Exc. Volts)	Std. Pkg. Qty.	*List Price
		TRAIN—30 and 60 Volts			
15	A-17 I. F.	Med.	15A	120	$0.20
25	A-19 I. F.	Med.	25A	120	.20
50	A-21 I. F.	Med.	50A21	120	.20
*100	A-23 I. F.	Med.	100A	120	.33
		TRAIN—ROUGH SERVICE—75 Volts			
25	A-17 I. F.	Med.	25A17/RS	120	.45
50	A-19 I. F.	Med.	50A19/RS	120	.45
		TRAIN—34 Volts			
15 S-14 I.F. (Loco. Cab)		Med.	15S14/IF	120	.20
		HEADLIGHT—32 Volts			
100	A-21 Clear	Med.	100A21/3	120	1.05
*200	PAR-56 Clear	Sc. Term.	200PAR	8	3.50
250	P-25 Clear	Med.	250P25	60	1.55

* 30 volts only.

G-E STREET RAILWAY LAMPS

115, 120, and 125 Volts

HEADLIGHTING. Headlight lamps are for operation in series with four lamps of corresponding wattage and voltage used elsewhere in the car.

36①	A-19 Cl. (.342 A.)	Med.	36A/RYH	120	$0.55
94①	P-25 Cl. (.863 A.)	Med.	94P25	60	1.00

CAR LIGHTING. 5-in-series lamps operate on the trolley voltage and are used for general illumination, destination signs.

36①	A-21 I.F. (.342 A.)	Med.	36A/RY	120	$0.20
56①	A-21 I.F. (.519 A.)	Med.	56A21	120	.22
101	A-23 I.F.	Med.	101A23	120	.40
201	PS-30 Cl.	Med.	201PS30	60	.75
301	PS-35 Cl.	Mog.	301PS35	24	1.30

CUTOUT LAMPS—30 Volts

Each lamp is equipped with an automatic short-circuiting element which cuts the lamp out of the circuit and prevents arcing when the lamp burns out.

—	A-19 I.F. (1.0 A.)	Med.	1A/A19	120	$0.30
—	A-21 I.F. (1.6 A.)	Med.	1.6A/A21	120	.35

① Nominal watts. Actual watts determined by multiplying volts by the amperes (amperes being the same for all voltages).

G-E TRAFFIC SIGNAL LAMPS

115, 120, and 125 Volts

These lamps have a short light center length, and produce enough light for a signal indication of requisite brightness. In the interest of public safety it is strongly recommended that no lamp of lower wattage be used.

Watts	Bulb and Finish	Base	Lamp Ordering Abbrev. (Exc. Volts)	Std. Pkg. Qty.	*List Price
60	A-21 Clear	Med. Screw	60A21/TS	120	$0.25
67	A-21 Clear	Med. Screw	67A21/40	120	.30

G-E STREET SERIES LAMPS

Amps.	Lumens	Approx. Initial Volts	Clear Bulb	Lamp Ordering Abbrev. ①	Std. Pkg. Qty.	*List Price
			Mogul Screw Base			
6.6	1000	9.4	PS-25	1M/66	60	$0.40
6.6	2500	21.7	PS-35	2500/66	24	.80
6.6	4000	31.9	PS-35	4M/66	24	.95
6.6	6000	46.9	PS-40	6M/66	24	1.35
15	4000	13.5	PS-35	4M/15BU	24	1.05
15	4000	13.5	PS-35	4M/15BD	24	1.05
20	6000	14.7	PS-40	6M/20BU	24	1.45
20	6000	14.7	PS-40	6M/20BD	24	1.45
20	10000	24.3	PS-40	10M/20BU	24	1.85
20	10000	24.3	PS-40	10M/20BD	24	1.85
20	15000	35.7	PS-40	15M/20BU	24	2.55
20	15000	35.7	PS-40	15M/20BD	24	2.55

① BU = Base up burning. BD = Base down burning.

GENERAL ELECTRIC AVIATION LAMPS



T-20

Effective functioning of aviation lighting equipment requires accurate positioning. Bipost and prefocus bases provide a high degree of accuracy.

Watts or Nom. Lumens	Bulb	Base	Volts or Amps.	Lamp Ordering Abbrev. (Exc. Volts)	Std. Pkg. Qty.	*List Price
			AIRCRAFT MARKER LAMPS (Clear)			
325L	A-21	Med. Pf.	6.6A	325/66/A21	120	$0.70
1020L	A-21	Med. Pf.	6.6A	1020/66/A21	120	.70
30	T-10	Med. Pf.	6.6A	6.6A/T10/1P	60	.95
200	T-14	Med. Pf.	6.6A	6.6A/T14P	24	2.70
			AIRPORT APPROACH LAMP (Lens Cover)			
250	PAR-56	Mog. End Prong	12.5	250PAR	8	2.90
			AIRWAY BEACON LAMPS (Clear)			
500	T-20	Med. Bip. ①		500T20/13	12	4.60
1000	T-20	Mog. Bip. ①		1M/T20BP	12	6.50

① Voltages: 115, 120, and 125.

*** List Prices do not include Federal Excise Tax.**

GENERAL ELECTRIC LAMPS



G-3½ G-4½ G-6 S-8 D. C. Index S-8 D. C. Bay. RP-11 Bayonet RP-11 Prefocus

G-E Lamp Number	*List Price	C. P.	Bulb	Base
6-8 VOLT—AUTOMOTIVE SERVICE				
51	$0.09	1	G-3½	Min. Bay.
55	.09	2	G-4½	Min. Bay.
63	.10	3	G-6	S. C. Bay.
64	.12	3	G-6	D. C. Bay.
81	.12	6	G-6	S. C. Bay.
82	.14	6	G-6	D. C. Bay.
87	.23	15	S-8	S. C. Bay.
88	.25	15	S-8	D. C. Bay.
1007	.42	32	RP-11	S. C. Pref.
1129	.25	21	S-8	S. C. Bay.
1130	.27	21	S-8	D. C. Bay.
1133	.27	32	RP-11	S. C. Bay.
1000	.32	32-32	RP-11	D. C. Bay.
1154	.32	21-3	S-8	D. C. Index
1158	.32	21-3	S-8	D. C. Bay.
1323	.42	32	RP-11	S. C. Pref.
2330	.43	32-32	RP-11	D. C. Pref.
2331	.47	32-32	RP-11	D. C. Pref.
12-16 VOLT—MOTOR TRUCK AND COACH				
57	.15	1½ (nom.)	G-4½	Min. Bay.
67	.13	3	G-6	S. C. Bay.
68	.15	3	G-6	D. C. Bay.
89	.14	6	G-6	S. C. Bay.
93	.27	15	S-8	S. C. Bay.
94	.29	15	S-8	D. C. Bay.
1016	.53	21-6	S-8	D. C. Index
1124	.50	32-32	RP-11	D. C. Bay.
1141	.29	21	S-8	S. C. Bay.
1142	.31	21	S-8	D. C. Bay.
1143	.37	32	RP-11	S. C. Bay.
1144	.39	32	RP-11	D. C. Bay.
1176	.52	21-6	S-8	D. C. Bay.
1327	.62	32	RP-11	S. C. Pref.
2336	.63	32-32	RP-11	D. C. Pref.

RADIO PANEL, INDICATORS, MISCELLANEOUS

G-E Lp. Number	*List Price	Bulb	Rated Volts	Amps.	Base
41	$0.11	T-3¼	2.5	0.50	Min. Screw
40	.11	T-3¼	6-8	0.15	Min. Screw
46	.11	T-3¼	6-8	0.25	Min. Screw
50	.11	G-3½	6-8	0.22	Min. Screw
1490	.11	T-3¼	3.2	0.16	Min. Bay.
47	.11	T-3¼	6-8	0.15	Min. Bay.
44	.11	T-3¼	6-8	0.25	Min. Bay.
1458	.15	G-5	20	0.25	Min. Bay.
TOY TRAIN					
428	.12	G-4½	12.5	0.25	Min. Screw
1446	.15	G-3½	12	0.20	Min. Screw
1449	.15	G-3½	14	0.20	Min. Screw
1447	.23	G-3½	18	0.15	Min. Screw
432	.13	G-4½	18	0.25	Min. Screw

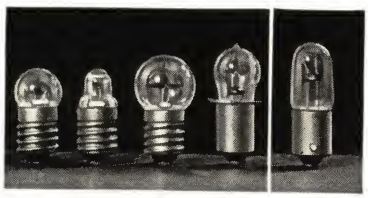
General Electric sealed beam headlamps are of rugged, all-glass construction — they do not grow dim! Same construction used in General Electric fog lamps.



G-E "L" LAMPS (Sealed Beam Types)

G-E Lp. Number	*List Price	Watts	Volts	Bulb	Base	Service
4030	$1.40	45-35	6-8	PAR-56	3 Cont. Lugs	Sealed Beam
4430	1.80	50-40	12-16	PAR-56	3 Cont. Lugs	Sealed Beam
4012	1.50	35	6-8	PAR-46	Screw Term.	Clear Fog
4012A	1.70	35	6-8	PAR-46	Screw Term.	Amber Fog
4013	1.45	25	6-8	PAR-46	Screw Term.	Clear Tractor
4015	1.45	35	6-8	PAR-36	Screw Term.	Clear Fog
4015A	1.65	35	6-8	PAR-36	Screw Term.	Amber Fog
4412	2.00	35	12-16	PAR-46	Screw Term.	Clear Fog
4412A	2.20	35	12-16	PAR-46	Screw Term.	Amber Fog
4435	2.35	30	12-16	PAR-46	Screw Term.	Clear Spot
4510	1.70	25	6-8	PAR-36	Screw Term.	Clear Utility
4515	1.80	30	6-8	PAR-36	Screw Term.	Clear Spot
4516	1.70	30	6-8	PAR-36	Screw Term.	Clear Hand Spot
4535	1.85	30	6-8	PAR-46	Screw Term.	Clear Spot

A unit package of above types consists of 8 lamps.



G-3½ TL-3 G-4½ B-3½ T-3¼

FLASHLIGHTS, HAND-LANTERNS, BICYCLES AND MIS-CELLANEOUS

Miniature Screw Base

G-E Lp. Number	*List Price	Bulb	Rated Volts	Design Amps.	Service Used with
112	$0.11	TL-3	1.20	0.22	1—AA cell
131	.11	G-3½	1.30	0.10	1—D
222	.11	TL-3	2.25	0.25	2—AA
223	.11	FE-3¾	2.25	0.25	2—AA
233	.11	G-3½	2.33	0.27	2—C
14	.11	G-3½	2.47	0.30	2—D
13	.11	G-3½	3.70	0.30	3—D
502	.12	G-4½	5.10	0.15	4—F
605	.13	G-4½	6.15	0.50	5—D
965	.17	T-4½	9.84	0.50	8—D

Single Contact Miniature Flange Base

PR4	.15	B-3½	2.33	0.27	2—C
PR2	.15	B-3½	2.38	0.50	2—D
PR6	.15	B-3½	2.47	0.30	2—D
PR3	.15	B-3½	3.57	0.50	3—D
PR7	.15	B-3½	3.70	0.30	3—D
PR12	.15	B-3½	5.95	0.50	5—D

AA-cells....½" dia., 1⅞" high
C-cell.....1" dia., 1⅛" high
D-cell.....1¼" dia., 2¼" high
F-cell.....1¼" dia., 3 7/16" high
No. 6 cell..2½" dia., 6" high

A unit package of lamps listed on this page shall consist of 10 lamps, except where otherwise specified, of the same G-E Lamp Number.

*** List Prices do not include Federal Excise Tax.**

McGILL ADAPTABLE LAMP CHANGERS

With Rubber Covered Fingers and Coil Spring



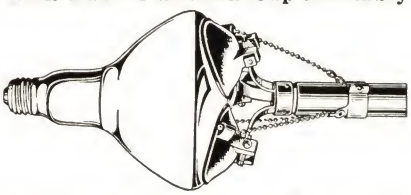
The McGill Adaptable Lamp Changer insures more convenient replacement of light bulbs in any location. A coil spring around the ends of the rubber covered fingers grips the bulb firmly.

The angle adjustment on the No. 150-CA and No. 151-CA, permits tilting of the head for bulbs in horizontal position. Indispensable for removing lamps from high inaccessible places in ceilings, signs, side walls, etc. Other models are furnished without angle adjustment.

Cat. No.	Lamp Size	Wt. Oz. Each	Price Each
	With Angle Adjustment		
150-CA	15- 60-w	8	**$7.40**
151-CA	100- 200-w	9	**7.40**
	No Angle Adjustment		
151-C	300- 500-w	10	**8.10**
153-C	750-1500-w	10	**8.60**
154-C	400-w Merc. Lamp	8	**8.60**
156-C	PAR-38, R-40	12	**8.10**

ADAPTABLE LAMP CHANGER

With Rubber Suction Cup Assembly



Designed for bottom contact of lamps mounted flush in window lighting and similar installations. Three rubber suction cups securely grip the bottom of 200-watt, spot or flood lamps.

Cat. No.	Description	Wt. Oz. Each	Price Each
157-C	Suction Cups, 200-watt, spot or flood	5	**$8.10**

STEEL LAMP CHANGER POLES

Insulated for Safety



Available in 5½-foot sections, fully insulated and interchangeable. Opposite ends telescope and lock to complete desired multiple section length. A rubber bumper for the assembled pole end is furnished with each changer head — protects furniture and floors.

Cat. No.	Description	Wt. Oz. Each	Price Each
160-P	Steel Interchangeable, 5½ ft. sections	24	**$5.20**

McGILL LAMP BASE REMOVER



Provides a fully insulated, safe and sure way to remove bases of broken lamp bulbs without possibility of injury to hands from shock or broken glass. Fits lamp changer pole and will handle standard and mogul lamp base.

Cat. No.	Description	Wt. Oz. Each	Price Each
200	Lamp Base Remover	4	**$2.60**

COMPCO LAMP TESTING EQUIPMENT

No. 172 FLUORESCENT LAMP AND STARTER TESTER



Tests all standard fluorescent lamps; 14 watt — 15-inch length; 15 watt — 18-inch length; 20 watt — 24-inch length; 25 watt — 33-inch length; 30 watt — 36-inch length; 40-watt — 48-inch length.

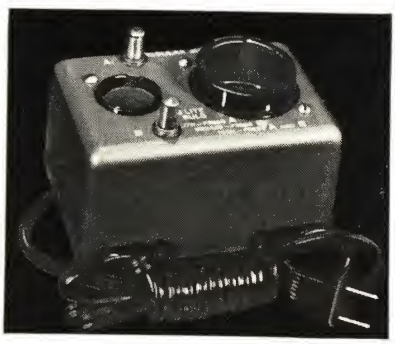
Tests starters — Starter Socket on same instrument board tests FS-2 for 14, 15, 20 watt lamps; FS-12 for 32 watt Circline Lamps; FS-25 for 25 watt lamps; FS-4 for 30 and 40 watt lamps; also "No-Blink" Starters.

Size 5½ inches wide x 11½ inches long. For 110-125 volts, 60 cycle A.C. Complete with cord and plug.

List Price, No. **172** Fluorescent Lamp and Starter Tester ..... each **$18.85**
List Price, No. **174** Circline Lamp Adaptor for use with No. 172 Tester..... each **$2.63**

No. 293 INCANDESCENT LAMP TESTER

For Mogul Base and Standard Base Lamps



Tests all multiple filament lamps (2 and 3 way), as well as all single filament lamps. Easy to operate. Just insert lamp, press switch and test is complete.

Attractively finished in washable, baked-on hammertone bronze enamel. Adjustable clips permit following types of installation:

a: Inside Lamp Bin. Flush with top.
b: On top of Lamp Counter.
c: Mounted on Bracket above Lamp Bin.
d: On Wall or Shelf.

Size 5¼ inches wide x 3⅝ inches long. For 110-125 volts, A.C. or D.C. Complete with cord and plug.

List Price, Model No. **293** Incandescent Lamp Tester ..... each **$6.83**

WESTON SIGHT METER

MODEL 703



This remarkable device is an adaptation of the famous Weston †Photronic photo-electric cell and is so simple that even a child can understand it.

The scale on the meter is not only scaled in foot-candles, but has literal indications of the minimum amount of light that is needed for seeing tasks.

It should take its place with the thermometer in the home, office, store, factory and school. It is indispensable for checking intensities of lighting installations. It checks and recommends proper standards of lighting for practically every type of factory work whereby increased production is realized. Cosine filters are available to correct for the direction of light. Instruments equipped with *Viscor and Cosine correcting filters have the same response to light as the human eye, both as to color of the light and the direction of it. Dimensions: 4⅝x2⅝x1⅝ inches. Approx. weight 10 oz.

Range	Price
0-100 Foot-Candles with *Viscor and Cosine Filters	**$42.00**
0-75 Foot-Candles	**27.00**
0-75 Foot-Candles with *Viscor Filter	**39.00**
Multiplier disc (x10)	**1.25**
Leather carrying case	**2.75**

*Viscor—A registered trademark designating the visual correction filter available only in Weston *Photronic Cells and Illumination Meters. Instruments equipped with Viscor filters measure correctly the visual intensity of any lighting source.

*Photronic-Registered trademark.

JUSTRITE 4-CELL ELECTRIC HEADLIGHT



Powerful "spot" beam. Headpiece straps around cap. Battery case clips on belt. 2½-inch polished reflector. Uses 4 flashlight cells. With 5-volt bulb. Weight 1 lb.

No. **1904** Headlight, less batteries.....each **$3.95**

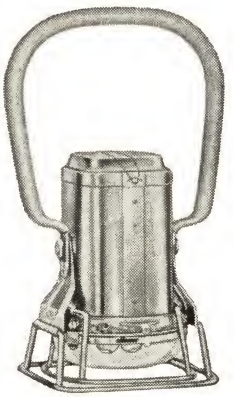
JUSTRITE FLASHLIGHTS AND LANTERNS



SAFETY SERVICE FLASHLIGHTS

Approved by Underwriters' Laboratories, U. S. Bureau of Mines, Bureau of Marine Inspection. Uses 3 regular flashlight cells. New design — only 5¾ inches high. Stands on base. Has belt clip. Case guaranteed against breakage. 2½-inch polished reflector.

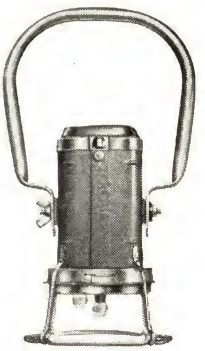
No. **1717S** Safety Flashlight, less batteries .....each **$4.35**



ALL-PURPOSE SAFETY HAND LANTERN

Approved by Underwriters', Bureau of Mines and Bureau of Marine Inspection. Uses standard 6-volt battery. Two bulbs—either gives both "spot" and diffused light. Tilts on base to any angle. Wide movable handle. 3½-inch chrome reflector and glass globe. Wt. 2½ lbs.

No. **2144S** Safety Lantern, less battery.....each **$7.80**

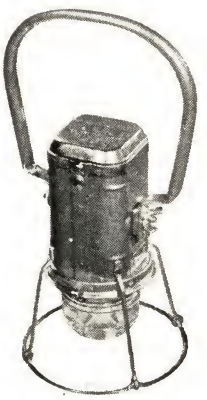


RAILROAD TRAINMAN'S LANTERNS

Uses standard 6-volt battery and bulbs. Powerful "spot" beam from one bulb. Other bulb extended for ordinary signals. Re-enforced aluminum tubing handle. Welded steel guard. 3½-inch chrome reflector. Wt. 2 lbs. Space for 2 spare bulbs.

No. **2140** Trainman's Lantern, less bulbs — less battery ....each **$4.00**

No. **2140W** same as above, but with special "signal" glass globe over reflector. Less bulbs, less battery. List Price.....each **$5.00**



FLAGMAN'S RED LANTERN

A warning beam — visible in all directions. Red fresnel globe covers bulb and emergency bulb mounted in lantern. Welded wide-base guard. Movable aluminum handle. Use standard lantern battery. Space for two spare bulbs. Wt. 3½ lbs.

No. **2172-JR** Red Flagman's Lantern, less battery, less bulbs .....each **$6.80**

JUSTRITE FLASHLIGHTS AND LANTERNS

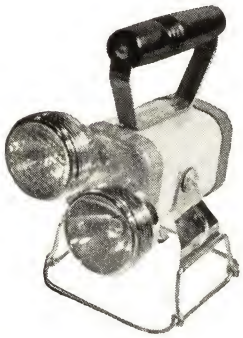
YELLOW-FLASH HEADLIGHT



For all purposes requiring both hands free. Ideal for camp chores, night loading, farm or guard duty. Sponge rubber headpad and strong belt loop on side to hold case in position on ordinary belt. Switch on handy location on headpiece. Weatherproof plastic connecting cord. Furnished with one bulb (for 8-cell operation).

No. **1958** Yellow-Flash Headlight, less batteries .....each **$4.95**

INSPECTOR'S LANTERNS



Gives wide spread-beam light from Justrite Honeycomb Lens. A separate light housing gives "spot" beam. Standard lantern battery and bulbs. Tilts on base to any angle. Two 2½-inch reflectors — interchangeable lenses — separate individual switches.

No. **2121** "Double-Header Type, less battery .....each **$7.20**

No. **2111.** Same as above, but has only one light housing — using "Honeycomb" spread-beam lens. Wt. 2 lbs. Less battery.....each **$6.20**

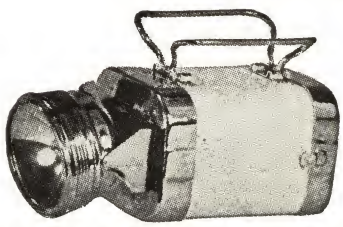
YELLOW-FLASH LANTERN



Has exclusive twin bulb reflector design with two bulbs mounted on a sliding plate. Either bulb gives both a strong spot beam plus short range diffused light. Bulbs interchanged instantly by moving the switch. Has large bail for carrying or hanging, or will stand on guard base with light directed at any angle. Furnished with two bulbs (for 8-cell operation).

No. **2198** Yellow-Flash Lantern, less batteries .....each **$4.45**

YELLOW-FLASH FLASHLIGHT



Wherever a good flashlight is needed — for hunters, peace officers, fishermen, householders, inspectors, farmers, campers, guards, watchmen — convenient to carry, small enough to fit tool kit, tackle box, or glove compartment — overall dimensions 8x3x3 inches.

Has 2½-inch polished reflector. Furnished with one bulb (for 8-cell operation).

No. **2108** Yellow-Flash Flashlight, less batteries.....each **$3.95**

RAY-O-VAC FLASHLIGHTS

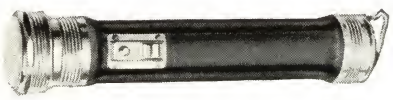
22FS 2-CELL SPOTLIGHT



Chrome and black. Uses No. 14 bulb and two 2LP batteries. Standard package, 24; weight 10 lbs.

Price, No. **22FS** Spotlight, less batteries.....**$1.60**

32FS 3-CELL SPOTLIGHT



Chrome and black. Uses No. 13 bulb and three 2LP batteries. Standard package, 24; weight 11¾ lbs.

Price, No. **32FS** Spotlight, less batteries.....**$1.95**

BR22 PREFOCUSED SPOTLIGHT



Has rubber end cap and hood and fibre barrel. Uses PR2 or PR6 bulb and two 2LP batteries. Standard package, 24; weight 11 lbs.

Price, No. **BR22** Spotlight, less batteries.....**$1.60**

G22 2-CELL PREFOCUSED SPOTLIGHT



Uses PR2 or PR6 bulb and two 2LP batteries. Standard package 24; weight 15 lbs.

Price, No. **G22** Spotlight, less batteries.....**$2.60**

G-32 3-CELL PREFOCUSED FLASHLIGHT



Uses PR3 or PR7 bulb and three 2LP batteries. Standard package, 24; weight 18¾ lbs.

Price, No. **G-32** Flashlight, less batteries.....**$2.67**

DUAL ACTION SAFETY HEAD FLASHLIGHTS



Cat. No.	Description	Bulb Used	Battery Used	Wt. Lbs. Std. Pkg.	Price Less Battery
BM22	2-Cell	PR2—PR6	2—2LP	15½	**$3.45**
BM32	3-Cell	PR3—PR7	3—2LP	18½	**4.20**

RAY-O-VAC FLASHLIGHTS

Z21P 2-CELL PENLIGHT



Uses 2 No. 7R batteries and No. 222 bulb. Standard package 24; weight 2¼ lbs.

Price, No. **Z21P** Penlight, less batteries.....**$0.80**

Z22B 2-CELL BABY SPOTLIGHT



Uses two 1LP batteries and No. PR4 bulb. Standard package 24; weight 6¼ lbs.

Price, No. **Z22B** Spotlight, less batteries.....**$1.60**

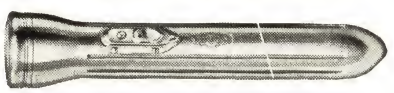
Z22R 2-CELL SPOTLIGHT



Uses two 2LP batteries and No. PR2 or PR6 bulb. Standard package 24; weight 9¾ lbs.

Price, No. **Z22R** Spotlight, less batteries.....**$1.60**

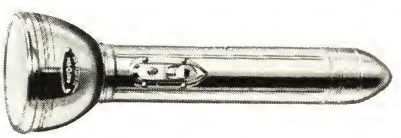
Z32R 3-CELL SPOTLIGHT



Uses three 2LP batteries and No. PR3 or PR7 bulb. Standard package 24; weight 11 lbs.

Price, No. **Z32R** Spotlight, less batteries.....**$1.95**

Z33R 3-CELL SEARCHLIGHT



Uses three 2LP batteries and No. PR3 or PR7 bulb. Standard package 24; weight 21 lbs.

Price, No. **Z33R** Searchlight, less batteries....**$2.60**

Z53R 5-CELL SEARCHLIGHT

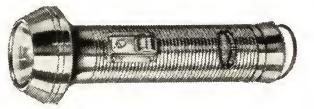


Uses five 2LP batteries and No. PR12 bulb. Standard package 12; weight 12¾ lbs.

Price, No. **Z53R** Searchlight, less batteries....**$3.35**

RAY-O-VAC FLASHLIGHTS

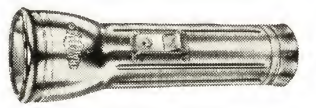
S22F SPOTLIGHT



The Ray-O-Vac Sportsman. Three position switch with signal button. Knurled chrome plated barrel. Bulb used, PR2 or PR6. Batteries used, two 2LP. Standard package; Packed only in Dealer package M-111.

Price, No. **S22F** Spotlight, less batteries.....**$1.95**

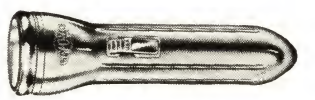
K22F 2-CELL SPOTLIGHT



Chrome plated. Has removable end cap. Uses bulb PR2 or PR6. Batteries used, two 2LP. Standard package 24; weight 9¾ lbs.

Price, No. **K22F** Spotlight, less batteries.....**$1.60**

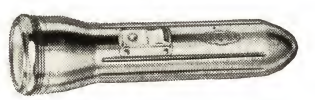
R22S SPOTLIGHT



Chrome plated copper slide switch. Uses bulb PR2 or PR6. Batteries used, two 2LP. Standard package 24; weight 9 lbs.

Price, No. **R22S** Spotlight, less batteries.....**$1.25**

C22R 2-CELL SPOTLIGHT



Uses bulb PR2 or PR6. Batteries used two 2LP. Standard package, 24; weight 9¾ lbs.

Price, No. **C22R** Spotlight, less batteries.....**$1.35**

TL24R TRAF-O-LITE



Traf-O-Lite solid shatterproof rod — white spot — red glow. Uses PR4 bulb and two 1LP batteries. Standard package, 24; weight 13 lbs.

Price, No. **TL24R** Traf-O-Lite, less batteries..**$2.60**

RAY-O-VAC BATTERIES

RAY-O-VAC No. 2LP LEAKPROOF FLASHLIGHT BATTERY



Size "D" Leakproof cell—for standard sized flashlights. Ray-O-Vac Leakproof batteries require no dating because they stay fresh for years and years. They guarantee any flashlight regardless of make against sticking, plugging or corrosion from leakage. They last longer in actual use.

Price No. **2** LP Leakproof Flashlight Battery **$0.125**

RAY-O-VAC LEAKPROOF No. 1 LP



Size "C" Leakproof cell — for baby or junior sized flashlight.

Price, No. **1** LP Leakproof Flashlight Battery **$0.125**

RAY-O-VAC No. 210LP LEAKPROOF PHOTOFLASH BATTERY



The famous guaranteed Leakproof construction. Comes packed in a colorful counter display carton of 24 batteries.

Price, No. **210LP** Leakproof Photoflash battery ..... each **$0.15**

RAY-O-VAC No. 941 LANTERN BATTERY



Tests by users prove the lowest possible cost per hour service. Laboratory controlled to maintain quality. Exceeds U. S. Government standards of service for this type of battery.

Standard on most railroads and wherever low service costs are vital.

Price, No. **941** Lantern Battery.....each **$0.80**

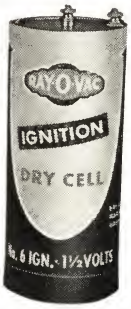
RAY-O-VAC 7R PENLIGHT BATTERY



This battery is manufactured of highest quality ingredients and has been accepted as standard equipment by many manufacturers of original equipment using this size cell.

Price, **7R** Penlight Battery.....each **$0.10**

RAY-O-VAC No. 6 IGNITION BATTERY



Now more than ever the standard of quality for 6-inch cells has long life, fast recuperation, hot spark.

Price, No. **6** Ignition Battery .....each **$0.80**

RAY-O-VAC BATTERIES

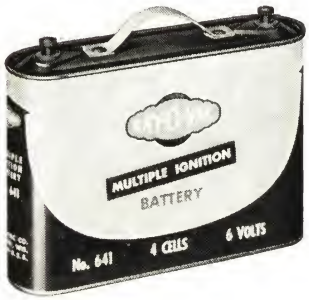


RAY-O-VAC No. 6 TELEPHONE BATTERY

Specially compounded mix for telephone service. High sustained voltage over long periods of time. Users acclaim economy and dependability.

Price, No. **6** Telephone Battery .....each **$0.75**

RAY-O-VAC No. 641 MULTIPLE BATTERY



Highest quality hot spark, 6-volt battery for heavy ignition service, encased in metal container insulated and cushioned against vibration; packed in standard packages of 4 to a package.

Price, No. **641** Multiple Battery.....each **$3.50**

LIGHTING BATTERY



1½-volt, with 2 pigtails. Length, 6⅜ inches; width, 5$\frac{11}{16}$ inches; B.H. 3$\frac{3}{16}$ inches. Burgess No. 18FS.

Price, No. **1918T** Lighting Battery ..... each **$2.45**



RAY-O-VAC No. 921-B SHOT FIRING BATTERY

3-volt battery for shot firing and blasting. High quality gives dependable service.

Price, No. **921-B** Shot Firing Battery .....each **$0.95**

NATIONAL SCREW & MFG. CO.

STEEL MACHINE SCREWS — SLOTTED

Round, Flat, Oval, Fillister and Truss Heads



In packages.

Length in Inches	Diam.	Price Per Gross
1/8	2	$0.41
3/16	2	.42
1/4	2	.43
5/16	2	.44
3/8	2	.45
7/16	2	.46
1/2	2	.47
9/16	2	.48
5/8	2	.49
3/4	2	.51
7/8	2	.54
1/8	3	.42
3/16	3	.43
1/4	3	.44
5/16	3	.45
3/8	3	.46
7/16	3	.47
1/2	3	.48
9/16	3	.49
5/8	3	.51
3/4	3	.53
7/8	3	.55
1/8	4	.43
3/16	4	.44
1/4	4	.45
5/16	4	.46
3/8	4	.47
7/16	4	.48
1/2	4	.49
9/16	4	.50
5/8	4	.52
3/4	4	.55
7/8	4	.57
1	4	.61
1 1/8	4	.70
1 1/4	4	.80
1 1/2	4	.90
1/8	5	.45
3/16	5	.46
1/4	5	.47
5/16	5	.48
3/8	5	.49
7/16	5	.50
1/2	5	.51
9/16	5	.52
5/8	5	.54
3/4	5	.57
7/8	5	.60
1	5	.64
1 1/8	5	.73
1 1/4	5	.82
1 1/2	5	.92
1 3/4	5	1.02
2	5	1.12
1/8	6	$0.47
3/16	6	.48
1/4	6	.49
5/16	6	.50
3/8	6	.51
7/16	6	.52
1/2	6	.54
9/16	6	.55
5/8	6	.57
3/4	6	.60
7/8	6	.65
1	6	.70
1 1/8	6	.80
1 1/4	6	.90
1 1/2	6	1.00
1 3/4	6	1.10
2	6	1.20
3/16	8	.60
1/4	8	.62
5/16	8	.64
3/8	8	.66
7/16	8	.68
1/2	8	.70
9/16	8	.72
5/8	8	.74
3/4	8	.77
7/8	8	.81
1	8	.88
1 1/8	8	.96
1 1/4	8	1.04
1 1/2	8	1.16
1 3/4	8	1.28
2	8	1.40
2 1/4	8	1.55
2 1/2	8	1.70
2 3/4	8	1.85
3	8	2.00
3/16	10	.67
1/4	10	.69
5/16	10	.71
3/8	10	.73
7/16	10	.75
1/2	10	.77
9/16	10	.79
5/8	10	.82
3/4	10	.87
7/8	10	.92
1	10	.98
1 1/8	10	1.06
1 1/4	10	1.15
1 1/2	10	1.30
1 3/4	10	1.45
2	10	1.60
2 1/4	10	1.80
2 1/2	10	2.00
2 3/4	10	2.20
3	10	2.40

NATIONAL SCREW & MFG. CO.

STEEL MACHINE SCREWS — SLOTTED

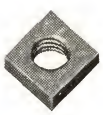
Round, Flat, Oval, Fillister and Truss Heads

In packages.

Length in Inches	Diam.	Price Per Gross
1/4	12	$0.83
5/16	12	.86
3/8	12	.89
7/16	12	.92
1/2	12	.95
9/16	12	.98
5/8	12	1.02
3/4	12	1.08
7/8	12	1.14
1	12	1.20
1 1/8	12	1.30
1 1/4	12	1.40
1 1/2	12	1.55
1 3/4	12	1.70
2	12	1.85
2 1/4	12	2.05
2 1/2	12	2.25
2 3/4	12	2.50
3	12	2.75
5/16	1/4	1.10
3/8	1/4	1.13
7/16	1/4	1.16
1/2	1/4	1.20
9/16	1/4	1.24
5/8	1/4	1.28
3/4	1/4	1.36
7/8	1/4	1.45
1	1/4	1.55
1 1/8	1/4	1.65
1 1/4	1/4	1.75
1 1/2	1/4	1.95
1 3/4	1/4	2.15
2	1/4	2.35
2 1/4	1/4	2.55
2 1/2	1/4	2.80
2 3/4	1/4	3.10
3	1/4	3.40
3/8	5/16	1.70
7/16	5/16	1.75
1/2	5/16	1.80
9/16	5/16	1.85
5/8	5/16	$1.95
3/4	5/16	2.05
7/8	5/16	2.20
1	5/16	2.35
1 1/8	5/16	2.50
1 1/4	5/16	2.65
1 1/2	5/16	3.00
1 3/4	5/16	3.35
2	5/16	3.70
2 1/4	5/16	4.05
2 1/2	5/16	4.40
2 3/4	5/16	4.80
3	5/16	5.20
1/2	3/8	2.75
9/16	3/8	2.85
5/8	3/8	2.95
3/4	3/8	3.10
7/8	3/8	3.30
1	3/8	3.50
1 1/8	3/8	3.70
1 1/4	3/8	3.90
1 1/2	3/8	4.30
1 3/4	3/8	4.70
2	3/8	5.10
2 1/4	3/8	5.60
2 1/2	3/8	6.20
2 3/4	3/8	6.80
3	3/8	7.50
3/4	1/2	6.50
7/8	1/2	6.80
1	1/2	7.20
1 1/8	1/2	7.50
1 1/4	1/2	7.90
1 1/2	1/2	8.60
1 3/4	1/2	9.40
2	1/2	10.20
2 1/4	1/2	11.10
2 1/2	1/2	12.10
2 3/4	1/2	13.10
3	1/2	14.10

STEEL MACHINE SCREW NUTS

Hexagon and Square





Size	Coarse Thread	Fine Thread	Width Inches	Thickness Inches	Price Per Gross Hexagon	Price Per Gross Square
2	56	64	3/16	1/16	$0.75	$0.67
3	48	56	3/16	1/16	.75	.67
4	40	48	1/4	3/32	.66	.62
5	40	44	5/16	7/64	.70	.64
6	32	40	5/16	7/64	.70	.64
8	32	36	11/32	1/8	.76	.67
10	24	32	3/8	1/8	.82	.70
12	24	28	7/16	5/32	1.05	.90
1/4	20	28	7/16	3/16	1.20	1.00
5/16	18	24	9/16	7/32	1.90	1.60
3/8	16	24	5/8	1/4	2.60	2.20

Applicable to Package Machine Screw Nuts in any quantities and to bulk shipments less than 15,000 pieces per item.

NATIONAL SCREW & MFG. CO.

STEEL WOOD SCREWS — SLOTTED

Round, Flat and Oval Heads



In packages.

Length in Inches	Diam	Price Per Gross
¼	2	$0.88
⅜	2	.92
½	2	.96
⅝	2	1.00
⅜	3	.92
½	3	.96
⅝	3	1.00
¼	4	.92
⅜	4	.96
½	4	*1.00
⅝	4	*1.04
¾	4	*1.08
⅞	4	1.12
1	4	*1.20
1¼	4	1.42
⅜	5	.96
½	5	1.00
⅝	5	1.04
¾	5	*1.08
⅞	5	1.12
1	5	*1.20
1¼	5	1.42
⅜	6	1.00
½	6	*1.04
⅝	6	*1.08
¾	6	*1.12
⅞	6	*1.20
1	6	*1.32
1¼	6	*1.50
1½	6	*1.66
½	7	1.08
⅝	7	1.12
¾	7	*1.20
⅞	7	1.28
1	7	1.40
1¼	7	*1.54
1½	7	1.70
½	8	1.16
⅝	8	1.20
¾	8	*1.28
⅞	8	*1.36
1	8	*1.46
1¼	8	*1.62
1½	8	*1.80
1¾	8	*2.00
2	8	*2.20
2½	8	2.62
¾	9	*$1.42
⅞	9	1.50
1	9	*1.58
1¼	9	*1.74
1½	9	1.96
1¾	9	*2.18
2	9	2.38
2½	9	2.80
¾	10	1.58
⅞	10	1.66
1	10	*1.74
1¼	10	*1.92
1½	10	*2.12
1¾	10	*2.34
2	10	*2.56
2¼	10	2.80
2½	10	*3.04
3	10	*3.54
3½	10	4.92
¾	12	1.80
⅞	12	1.96
1	12	*2.12
1¼	12	*2.30
1½	12	*2.54
1¾	12	*2.84
2	12	*3.14
2¼	12	3.46
2½	12	*3.78
3	12	*4.80
3½	12	5.84
1	14	*2.62
1¼	14	2.96
1½	14	*3.30
1¾	14	*3.64
2	14	*3.98
2¼	14	*4.34
2½	14	*4.84
3	14	*6.00
3½	14	7.16
4	14	*8.00
1¼	16	3.92
1½	16	4.34
1¾	16	4.75
2	16	*5.16
2½	16	*6.34
3	16	*7.50
3½	16	8.35
4	16	9.15
1½	18	5.30
2	18	*6.40
2½	18	*7.90
3	18	9.40
3½	18	10.45
4	18	11.70

*Drive Screws—Use same price as Wood Screws in corresponding sizes. Drive Screws are normally made in Flat Head Steel only and in those sizes marked with an Asterisk. Other styles and sizes can be secured when ordered in sufficient quantity.

NATIONAL SCREW & MFG. CO.

STOVE BOLTS — SLOTTED

Round, Flat, and Truss Heads

With American Standard Square Nuts



In packages.

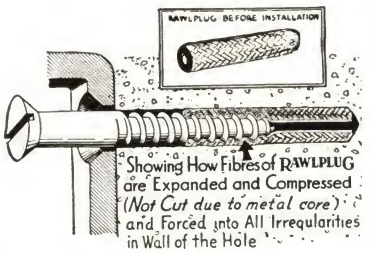
Length in Inches	Diam.	Price Per 100
⅜	1/8	$0.86
½	1/8	.88
⅝	1/8	.90
¾	1/8	.92
⅞	1/8	.95
1	1/8	1.00
1⅛	1/8	1.05
1¼	1/8	1.10
1⅜	1/8	1.15
1½	1/8	1.20
1¾	1/8	1.30
2	1/8	1.45
⅜	5/32	.95
½	5/32	.97
⅝	5/32	.99
¾	5/32	1.02
⅞	5/32	1.06
1	5/32	1.10
1⅛	5/32	1.15
1¼	5/32	1.20
1⅜	5/32	1.25
1½	5/32	1.30
1¾	5/32	1.45
2	5/32	1.60
2¼	5/32	1.75
2½	5/32	1.95
2¾	5/32	2.10
3	5/32	2.30
⅜	3/16	1.00
½	3/16	1.04
⅝	3/16	1.08
¾	3/16	1.12
⅞	3/16	1.16
1	3/16	1.20
1⅛	3/16	1.25
1¼	3/16	1.30
1⅜	3/16	1.35
1½	3/16	1.40
1¾	3/16	1.55
2	3/16	1.75
2¼	3/16	1.90
2½	3/16	2.10
2¾	3/16	2.25
3	3/16	2.45
3½	3/16	2.80
4	3/16	3.15
4½	3/16	3.50
5	3/16	3.85
5½	3/16	4.20
6	3/16	4.60
⅜	1/4	1.55
½	1/4	1.55
⅝	1/4	1.60
¾	1/4	1.65
⅞	1/4	1.70
1	1/4	1.75
1⅛	1/4	1.80
1¼	1/4	1.90
1⅜	1/4	1.95
1½	1/4	2.05
1¾	1/4	2.20
2	1/4	2.40
2¼	1/4	2.65
2½	1/4	2.90
2¾	1/4	$3.15
3	1/4	3.40
3½	1/4	3.90
4	1/4	4.40
4½	1/4	4.85
5	1/4	5.35
5½	1/4	5.80
6	1/4	6.30
⅜	5/16	2.60
½	5/16	2.60
⅝	5/16	2.60
¾	5/16	2.60
⅞	5/16	2.70
1	5/16	2.80
1⅛	5/16	2.90
1¼	5/16	3.00
1⅜	5/16	3.10
1½	5/16	3.20
1¾	5/16	3.50
2	5/16	3.80
2¼	5/16	4.10
2½	5/16	4.40
2¾	5/16	4.70
3	5/16	5.00
3½	5/16	5.50
4	5/16	6.20
4½	5/16	6.90
5	5/16	7.60
5½	5/16	8.30
6	5/16	9.00
⅝	3/8	3.80
¾	3/8	3.80
⅞	3/8	3.90
1	3/8	4.00
1⅛	3/8	4.15
1¼	3/8	4.30
1⅜	3/8	4.45
1½	3/8	4.60
1¾	3/8	4.90
2	3/8	5.20
2¼	3/8	5.60
2½	3/8	6.00
2¾	3/8	6.40
3	3/8	6.80
3½	3/8	7.60
4	3/8	8.40
4½	3/8	9.30
5	3/8	10.20
5½	3/8	11.10
6	3/8	12.00
¾	1/2	9.30
1	1/2	9.30
1⅛	1/2	9.50
1¼	1/2	9.70
1⅜	1/2	10.00
1½	1/2	10.30
1¾	1/2	10.90
2	1/2	11.60
2¼	1/2	12.40
2½	1/2	13.20
2¾	1/2	14.00
3	1/2	14.90
3½	1/2	16.60
4	1/2	18.30

RAWLPLUGS

REG. U.S. PAT. OFF.

FIBRE ANCHORS FOR USE IN ANY MATERIAL WITH WOOD OR LAG SCREWS

Holds Screws Fast



The Rawlplug has a high compression value. The hole, screw, and Rawlplug are practically the same size, therefore the fibres must be compressed when screw enters Rawlplug. Due to the metal core, the threads of the screw do not cut the fibres of the plug, but instead thread the metal core, making it possible to unscrew and replace the screw.



The fibre construction of the Rawlplug being flexible permits the plug to conform to any irregularities of the hole under compressive action of screw. Thus the entire length and circumference of plug grips the full surface of hole. Because of this "elastic compression" shock and vibration have no effect on the gripping power of Rawlplugs.



They work equally well in any material: wood, glass, masonry, plasters, slate, rubber, marble, tile, brick, concrete, or metal. Unaffected by moistures, temperature, insects, fungus, vibration, or shock.

RAWLPLUGS CONTRACTORS' OUTFIT



The ideal outfit for superintendents of office buildings, institutions, hotels, apartments, maintenance engineers in industrial plants and all contractors. Complete with assortments of popular size Rawlplugs, Rawl-Grips, Rawl-Twist drills, Rawldrills, Toolholders, Tool Ejector and samples of other Rawl Products all conveniently placed in a heavy gauge steel mechanic's tool box.

List price complete **$40.00**

(Total List value of contents $49.50.)

RAWLPLUGS

REG. U.S. PAT. OFF.

FOR USE WITH STANDARD WOOD SCREWS

For Wood Screw		Use Rawlplug		Price Per 100	Lbs. Approx. Wgt. per Std.Pkg. (12 Boxes)	Use M/T or R/T Rawldrill		Use Tool-Holder No.	Use Twist Drill Size
Sizes	Lgths.	Size	†Lgh.			No.	Dia.		
5-6	1″ 1¼″ 1½″	6	⅝″ ¾″ 1″	$2.70 2.80 3.00	1 1 1½	6 $11.50 Per Doz.	11/32″	14 $24.00 Per Doz.	11/32″
7-8	1″ 1¼″ 1½″ 2″ 2½″	8	⅝″ ¾″ 1″ 1½″	3.10 3.20 3.40 3.80	1½ 1½ 2 2½	8 $11.50 Per Doz.	11/64″	14 $24.00 Per Doz.	No. 15
9-10	1¼″ 1½″ 1¾″ 2″ 2½″	10	¾″ 1″ 1¼″ 1½″	3.40 3.80 4.20 4.60	1¾ 2½ 2¾ 3¼	10 $11.50 Per Doz.	3/16″	14 $24.00 Per Doz.	No. 10
11-12	1¼″ 1½″ 1¾″ 2″ 2½″	12	¾″ 1″ 1¼″ 1½″	4.20 4.60 5.00 5.40	2½ 3½ 4¾ 5½	12 $11.50 Per Doz.	¼″	14 $24.00 Per Doz.	¼″
* 14 or ¼″ lag screw	1½″ 1¾″ 2″ 2½″ 3″ 3½″	14	1″ 1¼″ 1½″ 2″	5.40 6.00 6.60 7.80	4½ 5½ 6 8	14 $12.50 Per Doz.	5/32″	14 $24.00 Per Doz.	5/32″
16	1½″ 2″ 2½″ 3″ 3½″	16	1″ 1½″ 2″	6.10 7.60 9.10	2½ 3¾ 5	16 $13.60 Per Doz.	5/16″	20 $30.00 Per Doz.	5/16″
* 20 or 5/16″ lag screw	1½″ 2″ 2½″ 3″ 3½″	20	1″ 1½″ 2″	9.00 11.00 13.00	3½ 5½ 7½	20 $15.70 Per Doz.	3/8″	20 $30.00 Per Doz.	3/8″

Sizes Nos. 6-14 inclusive, packed 100 to a box.
Sizes Nos. 16-20 packed 50 to a box.

FOR USE WITH LAG SCREWS

For Lag Screw		Use Rawlplug		Price Per 100	Lbs. Approx. Wgt. Per Std. Pkg. (12 Boxes)	‡Rawlplugs Packedin Boxes of	Use Rawldrill Size	Use Twist Drill Size
Size	Lengths	Size	Lgth.†					
3/8″	2½″ 3″ 3½″ 4″ 4½″ 5″ 5½″ 6″	3/8	1½″ 2″ 2½″ 3″	$19.00 20.00 21.00 22.00	3½ 4½ 5½ 6½	25	▲7/16″	7/16″
7/16″	2½″ 3″ 3½″ 4″ 4½″ 5″ 5½″ 6″	7/16	1½″ 2″ 2½″ 3″	26.00 27.00 28.00 29.00	4½ 4¾ 5½ 7½	25	1/2″	1/2″
1/2″	3½″ 4″ 4½″ 5″ 5½″ 6″	1/2	2″ 2½″ 3″	32.00 33.00 34.00	7½ 8½ 10	25	5/8″	5/8″
5/8″	4½″ 5″ 5½″ 6″ 7″	5/8	2½″ 3″ 3½″	38.00 39.00 40.00	11 13 15	25	3/4″	3/4″

*{For ¼″ Lag Screw use No. 14 Rawlplug.
{For 5/16″ Lag Screw use No. 20 Rawlplug.
▲For 7/16″ M/T and ½″, 5/8″, ¾″ R/T Rawldrills use No. 20 Holder.
†Prices quoted upon request for any size and length not shown above.
‡Standard Package contains one dozen boxes of Rawlplugs of same size and length or one dozen M/T or R/T Rawldrills or ½ dozen Holders of the same size.

RAWLDRILLS

TYPES OF RAWLDRILLS AND ACCESSORIES

Machined Type (symbol M/T straight flute, R/T twist flute). Accurately machined to size from solid bars of high grade tool steel. Recommended when drilling holes for Rawlplugs, Rawl-Drives, and all types of expansion bolts.

Used in a tool holder when drilling by hand and in Rawl-Chuck when drilling by power hammer. Can be resharpened on any grinding wheel. Made to exact diameters.



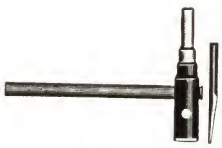


STRAIGHT FLUTE
M/T (Machined Type)
Rawldrills



TWIST FLUTE
(R/T) Rawl-Twist Drills

RAWL-CHUCK



Made of chrome nickel steel accurately machined and heat treated for a severe service in all standard electric and pneumatic chipping hammers.

In ordering be sure to specify make of hammer and size, and if pneumatic whether round or hexagon barrel, and whether for No. 14, No. 20 or No. ⅝ drill taper.

Rawl-Chucks ..... each **$8.00**
Special tool steel ejector pin for chucks (5" long) ..... net each **.90**
Extra shank pins for Pneumatic Chucks..... net each **1.90**

RAWL-GRIP



To Fit Standard Tool Holders

Made of live hard rubber in two sizes, easily applied to No. 14 and No. 20 Rawldrill holders. Gives safe, comfortable and firm cushion grip.



No. 14 (Fits No. 14 Holder)..... **$2.25 each**
No. 20 (Fits No. 20 Holder)..... **2.25 each**



Forged Drills — Standard Type (Symbol S/T) for Hand Drilling. Made in sizes from ⅜" to 1⅝" inclusive. Enlarged handle eliminates shock to hand — makes drilling easier.



Rawl-Spiral Carbide Drill—Made in sizes from ⅛" to 1½" inclusive.

Taper Shank (Symbol T/S) Power Hammers.



No. ⅝ Taper on Drills ⅜" to 1⅝" diameter inclusive.



No. 20 Taper on Drills No. 16 (1/16") to ⅞" diameter inclusive.



No. 14 Taper on M/T Drills No. 6-14 inclusive.

Used in a tool holder when drilling by hand and in Rawl-Chuck when drilling by power hammer.

RAWLDRILLS

DRILL HOLDERS AND MACHINED (M/T) OR TWIST TYPE (R/T) RAWLDRILLS

Drills Size	Drills Diameter	List Price per Dozen‡	Use Drill-Holder No.	Drill Holders List Per Dozen‡
6	5/32"	$11.50		
8	11/64"	11.50		
10	3/16"	11.50	14	$24.00
12	1/4"	11.50		
14	9/32"	12.50		
16	5/16"	13.60		
20	3/8"	15.70		
7/16"	7/16"	31.00	20	$30.00
1/2"	1/2"	**34.00		
5/8"	5/8"	**45.00		
3/4"	3/4"	**60.00		

Ejectors for Drill Holders — $6.00 per dozen. F.O.B. Nearest Branch.
‡Subject to Trade Discounts. **Made in Twist Type Only.

STANDARD TYPE (S/T) FORGED DRILLS — Size Actual Diameter	List Price per Dozen‡ Length Over All: As Shown	12"
3/8" x 9"	$20.40	....
7/16" x 10"	20.40	....
1/2" x 10"	20.40	....
9/16" x 12"	....	$20.40
5/8"	....	20.40
11/16"	....	24.00
3/4"	....	24.00
13/16" x 12"	....	26.40
7/8"	....	26.40
1"	....	27.00
1 1/8"	....	36.00
1 1/4" x 12"	....	45.00
1 3/8"	....	60.00
1 1/2"	....	75.00
1 5/8"	....	90.00

RAWL-SPIRAL CARBIDE DRILLS — Nominal Diameter	Length Over All Inches	List Price Each‡
3/16	3	$ 1.80
1/4	4	1.80
5/16	4	1.95
3/8	4	2.15
7/16	6	2.40
1/2	6	2.70
9/16	6	3.00
5/8	6	3.30
11/16	6	3.75
3/4	6	4.20
7/8	6	5.10
1	6	7.20
1 1/8	6	8.70
1 1/4	10	10.50
1 1/2	10	12.90

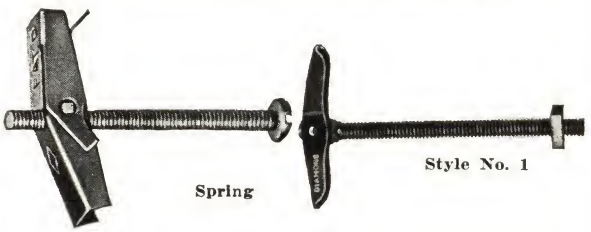
Prices on 18" and 24" Drills on Application.
‡Subject to Trade Discounts. F.O.B. Nearest Branch.

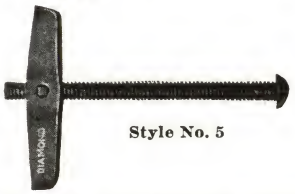
TAPER SHANK (T/S) RAWLDRILLS

Size, Actual Diameter	Length Over All — List Price Per Dozen‡: No. 20 Rawldrill Taper 6"	12"	No. ⅝ Rawldrill Taper 6"	12"
3/8"	$15.00	....	$22.80	....
7/16"	15.60	$19.80	23.40	$30.00
1/2"	17.40	19.80	26.40	30.00
9/16"	19.80	....	30.00	....
5/8"	19.80	24.00	30.00	36.00
11/16"	22.80	....	30.00	....
3/4"	22.80	26.40	30.00	36.00
13/16"	25.20	....	30.00	....
7/8"	25.20	30.00	30.00	36.00
1"	....	....	30.00	36.00
1 1/8"	....	....	33.60	37.80
1 1/4"	....	....	44.40	49.20
1 3/8"	....	....	....	52.80
1 1/2"	....	....	....	60.00
1 5/8"	....	....	....	72.00

Prices on 18" and 24" Drills on Application.
‡Subject to Trade Discounts F.O.B. Nearest Branch.

DIAMOND TOGGLE BOLTS





Types of Heads available on Spring and No. 5 Toggles



F Type—with Flat Head Screws
R Type—with Round Head Screws
M Type—with Mushroom Head—⅛" diam. only.
N Type—Reverse **R** or **F** screw and add nut.
P Type—Reverse **R** or **F** screw and add Acorn nut.

STANDARD TOGGLE BOLTS
Uniform for All Types

Bolt Size Diam.	Lgth.	Drill Size Spring & No. 5	Drill Size No. 1	Shipping Wt., per 100 Toggles Spring	Shipping Wt., per 100 Toggles No. 5	Shipping Wt., per 100 Toggles No. 1	Price Per 100
1/8" or (6-32)	3	3/8	1/4	2	2	3	$9.00
	4	3/8	1/4	2¼	2¼	3¼	10.00
3/16" or (10-24)	3	1/2	3/8	3¾	4¼	4¼	9.50
	4	1/2	3/8	4¼	4¾	4¾	10.00
	5	1/2	3/8	4¾	5½	5¾	12.00
	6	1/2	3/8	5½	6	6	12.50
1/4"-20	3	11/16	7/16	6	7	7	10.50
	4	11/16	7/16	7¼	8	9	11.00
	5	11/16	7/16	8½	9½	10	14.00
	6	11/16	7/16	9½	10½	10¼	15.50
5/16"-18	3	13/16	9/16	11	12	11	16.00
	4	13/16	9/16	13	13¾	12½	17.00
	5	13/16	9/16	15	15½	14	21.50
	6	13/16	9/16	17	17¾	16½	23.00
3/8"-16	3	7/8	5/8	....	14¾	17½	21.00
	4	(No. 5	5/8	....	17½	19½	23.00
	5	only)	5/8	....	20	22½	28.50
	6		5/8	....	23½	24¼	30.00
1/2"-13	3	....	7/8	....	....	33	37.00
	4	....	7/8	....	....	40	40.50
	5	....	7/8	....	....	44½	52.00
	6	....	7/8	....	....	52	59.00

TOGGLE HEADS ONLY
Spring or Diamond No. 5

Bolt Size Inches	List Price Per 100 Steel	List Price Per 100 Brass
1/8" (6-32)	$8.00	$22.40
3/16" (10-24)	8.25	23.10
1/4"-20	8.75	24.50
5/16"-18	12.00	33.60
3/8"-16	16.00	44.80
½"	25.00	.....

A List for brass bolts and steel heads, multiply the steel list by 2 (two), subject to regular discounts.

A List for brass bolts and brass toggle heads, multiply the steel list by 2.8 (two and eight tenths) subject to regular discounts.

DIAMOND EXPANSION SHIELDS

SUPER-GRIP—STYLE A EXPANSION SHIELDS
For Machine Bolts



This expansion is known for its high holding power and is made of two metals, lead and brass, which are rust resistant.

May be used with or without setting tool.

Without Bolts or Screws

Diam. Bolt or Screw	Length of Shield	Diam. of Hole and Drill	Wt. Lbs. Per 100	Price Per 100
3/16 8-32 10-24	½	5/16	1.2	$10.00
¼ 12-24	1⅛	7/16	3.8	15.00
5/16	1¼	½	6	18.00
⅜	1¾	9/16	9	25.00
½	2¼	¾	21	38.00
⅝	2⅝	⅞	31	45.00
¾	3	1	42	65.00

SUPER-GRIP — STYLE B EXPANSION BOLTS
Patented

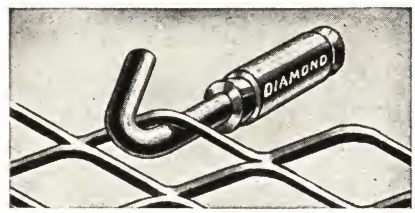


Bolt has tapered cone-shaped end, which expands the lead-alloy sleeve. Can be used with or without setting tool. Bolts and nuts are "Diamond" Intergalvanized. Sold complete only.

Prices per 100—Complete with Galvanized Bolts

Bolt Dia.	Drill Size	Length Inches 1½ Inch	2 Inch	2½ Inch	3 Inch
¼	7/16	$9.30	$9.50	$9.70	$9.90
5/16	½	.....	11.40	11.80	12.20
⅜	9/16	.....	.....	16.10	16.70
½	¾	.....	.....	.....	35.00
⅝	⅞	.....	.....	.....	57.00
		3½ Inch	4 Inch	5 Inch	6 Inch
⅜	9/16	$17.30	$18.00	$19.40	$20.10
½	¾	.....	39.00	43.00	47.00
⅝	⅞	.....	63.00	69.00	75.00
¾	1	.....	84.00	94.00	104.00

DIAMOND HOOK EXPANSION BOLTS



Diamond Hook Expansion Bolts supply a most positive attachment for suspending metal lath on walls, ceilings and floors.

Diam. Bolt	Size Drill to Use	Depth of Hole to Drill	Length of Hook Under Eye	Price Per 100
¼	½	1⅛	2	$8.25

One calking tool furnished free with each 100 bolts. Made in other sizes to suit particular requirements. Prices on application.

DIAMOND EXPANSION SHIELDS

DIAMOND "P" LAG SCREW EXPANSION SHIELDS



Prices do not include the lag screws.

Series 1000 Short

Cat. No.	Dia. of Lag	Lgth. Inches	Drill Size	No. Per Box	Shpg. Wt. Lbs. Per 100	Price Per 100
1004	¼	1	7/16	100	2	**$15.00**
1005	5/16	1	½	100	2½	**18.00**
1006	⅜	2	5/8	50	7½	**25.00**
1008	½	2	¾	50	10	**38.00**
1010	5/8	2	⅞	50	13	**45.00**
1012	¾	2	1⅛	25	21	**65.00**

Series 1100 Long

1104	¼	1½	½	100	4	**15.00**
1105	5/16	1¾	9/16	100	5	**18.00**
1106	⅜	2¾	5/8	50	11	**25.00**
1108	½	3½	¾	50	18	**38.00**
1110	5/8	3½	⅞	25	23	**45.00**
1112	¾	3½	1⅛	25	35	**65.00**
1114	⅞	5	1⅜	25	75	**95.00**
1116	1	5	1½	25	90	**110.00**
1120	1¼	8	1⅞	20	270	**250.00**

DIAMOND CALKING ANCHORS



Cat. No.	Size	Drill Size	Length Inches	Wt. Lbs. Per 100	Price Per 100
3020	6–32	¼	⅜	¾	**$6.00**
3025	8–32	5/16	½	1½	**6.50**
3030	10–24	⅜	5/8	2	**7.50**
3035	12–24	7/16	¾	3½	**9.50**
3040	¼–20	½	⅞	5½	**11.00**
3050	5/16	5/8	1	10½	**15.00**
3060	3/8	¾	1¼	16	**20.00**
3070	7/16	⅞	1½	21	**26.00**
3080	1/2	⅞	1½	21	**26.00**
3100	5/8	1⅛	2	41	**50.00**
3120	3/4	1¼	2¼	64	**75.00**

Packaged—6/32 to 12-24—100 in box. ¼-20 to ¾—50 in box. One calking tool in each box.

RODALE INSULATED STAPLES

Cat. No.		Price Per 1000
67	100 to box	**$2.30**
67-A	50 to box	**2.50**



Packed 100 to the box. 10 boxes to the carton. Also 50 to the box, 20 to the carton. Size No. 7 packed 100 to box only. Four sizes. Copper plated.

Unit Carton, 1000. Standard Package 25,000. Weight, 50 pounds.

No. 1	No. 3	No. 5	No. 7
3/16" x ½"	3/16" x ¾"	¼" x 5/8"	⅜" x ⅞"

DIAMOND HAMMER DRIVE ANCHORS

D H D HAMMER DRIVE ANCHORS

Patented



Cat. No.	Diam. and Lgth. Shield	Diam. of Drill to Use	Std. Pkg.	Wt. Lbs. Per 100	Price Per 100
4314	3/16 x ⅞	3/16	100	1	**$8.00**
4320	3/16 x 1¼	3/16	100	1⅛	**9.00**
4416	¼ x 1	¼	100	1½	**10.00**
4420	¼ x 1¼	¼	100	2	**11.00**
4424	¼ x 1½	¼	100	2⅛	**12.00**
4520	5/16 x 1¼	5/16	100	2¾	**14.00**
4528	5/16 x 1¾	5/16	100	3½	**16.00**
4536	5/16 x 2¼	5/16	100	4½	**18.00**
4544	5/16 x 2¾	5/16	100	5	**20.00**
4632	⅜ x 2	⅜	100	6½	**20.00**
4652	⅜ x 3¼	⅜	100	8¼	**25.00**
4836	½ x 2¼	½	50	11½	**30.00**
4856	½ x 3½	½	50	15½	**35.00**

Holds a greater load when fastened to stone than a wood screw of same diameter screwed into wood. No special skill or tools needed. For attaching trim, partitions, flooring and fixtures to concrete structures. Heavily-galvanized nails are supplied with shields, packed in the same container.

DIAMOND N DRILLS



Cat. No. 700

4 Point Drills



Cat. No. 710

Single Point Drill

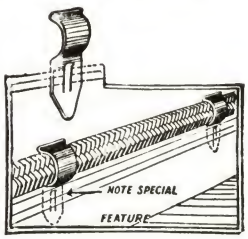
PRICE PER DOZEN

Lgth. In.	Diameter Drill, In. ¼	5/16	⅜	7/16	½	9/16 5/8	11/16 & ¾
8	**$8.25**	**$8.25**	**$8.25**	**$8.70**	**$9.65**	**$11.65**	**$13.70**
12	**8.50**	**8.50**	**8.50**	**9.00**	**10.00**	**12.00**	**14.00**
18	**11.00**	**11.00**	**11.00**	**11.50**	**12.50**	**15.00**	**17.50**
24	**13.50**	**13.50**	**13.50**	**14.00**	**15.00**	**17.50**	**20.00**

Lgth. In.	Diameter Drill, In. 13/16 & ⅞	1	1⅛	1¼	1⅜	1½
8	**$15.30**	**$17.00**	**$23.00**	.....	.....	.....
12	**16.00**	**18.00**	**24.00**	**$30.00**	**$40.00**	**$50.00**
18	**20.00**	**22.50**	**28.00**	**35.00**	**45.00**	**56.00**
24	**22.50**	**25.00**	**32.00**	**40.00**	**50.00**	**62.00**

Lgth. In.	Diameter Drill, In. 1⅝	1¾	1⅞	2	2¼	2½
12	**$60.00**	**$75.00**	**$90.00**	**$105.00**	**$135.00**	**$165.00**
18	**66.00**	**81.00**	**97.00**	**112.00**	**145.00**	**175.00**
24	**72.00**	**87.00**	**104.00**	**120.00**	**165.00**	**195.00**

RODALE MOULDING CLIPS



Brown and Ivory. 10 clips on card.

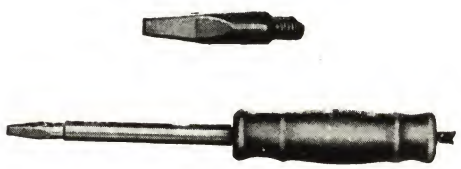
Cat. No.	No. of Cards Car-ton	Std. Pkg.	Pkg. Wt.	Price Per 100
	Brown Clips			
64	25	250	15	**$8.00**
	Ivory Clips			
64V	25	250	15	**8.00**

HEXACON ELECTRIC SOLDERING IRONS

Approved by the Underwriters' Laboratories, Inc.

Equipped with 6 ft. (10,000 cycle) approved heater cord and rubber plug. European type plug 25c extra list. Metal stand furnished with each iron. Elements in the plug tip irons are replaceable by the user and in the screw tip irons replaceable at the factory. Tips in all irons are replaceable; made of hard drawn pure copper. Smooth, cool, comfortable handle — readily replaceable. Fixed type handle standard equipment, but adjustable type can be furnished upon request, at no extra charge. Voltage range: 32 to 250. Standard voltages 110/120, 121/130, 220/250. All other voltages $1.00 extra list. Operate on A.C. or D.C., any voltage. Specify voltage when ordering.

SCREW TIP IRONS



No. 50. Light soldering on radio and telephone apparatus, electrical instruments, small fuses; for linemen's tool kits. 50 Watts. Tip diam. 7/16 in. Ship. wt., 1 lb. Equal to ½-lb. old style copper..... ..... each **$5.00**



No. 60. Medium light soldering on telephone, telegraph, radio, electrical instruments, small fuses; linemen's tool kits; radio repairs. 60 Watts. Tip diam. ½ in. Ship. wt. 1⅛ lb. Equal to 1 lb. old style copper ..... each **$7.00**



No. 85. High speed tool for telephone switchboards, electrical instruments, radio apparatus; faster radio repair, and home use. 90 Watts. Tip diam. ½ in. Ship. wt. 1¼ lbs. Equal to 1¼ lbs. old style copper..... each **$7.75**



No. 120. Light tinware, toys, typewriter type bars, light auto repairs. Extra high speed radio and electrical apparatus soldering. 120 Watts. Tip diam. 5/8 in. Ship. wt. 1⅜ lbs. Equal to 2 lb. old style copper ..... each **$8.50**



No. 130. Same as No. 120, except where larger tip is required. 130 Watts. Tip diam. ⅞ in. Ship. wt. 1⅝ lbs. Equal to 2 lb. old style copper..each **$9.50**

HEXACON ELECTRIC SOLDERING IRONS

Approved by the Underwriters' Laboratories, Inc.

SCREW TIP IRONS
(Continued)



No. 170. Medium tinware, small cans, auto repairs, organ pipes, gutters, leaders, toys, small motors. Suitable for small branders. 175 Watts. Tip diam. 1 in. Ship. wt. 2¼ lbs. Equal to 2½ lb. old style copper ..... each **$10.50**



No. 225. Medium tinware, medium cans, auto repairs, metal patterns, light roofing, gutters, medium sheet metal, airplane mfg. building maintenance. Suitable for small branders. 250 Watts. Tip diam. 1⅛ in. Ship. wt. 2⅝ lbs. Equal to 3 lb. old style copper ..... each **$12.50**



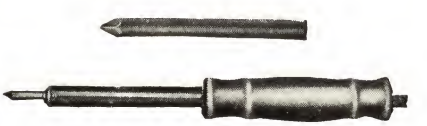
No. 350. Heavy tinware, large cans, auto radiators, roofing, refrigerators, galv. iron, gas meters, car building, shipbuilding, auto, airplane and metal boat building. Suitable for medium branders. 350 Watts. Tip diam. 1⅜ in. Ship. wt. 3⅜ lbs. Equal to 4 lb. old style copper..... each **$14.00**



No. 500. Auto radiators, copper sinks, roofs, large cans, galv. iron, tanks, auto bodies, fender dents, heavy armatures, milk cans, shipbuilding. Suitable for large branders. 500 Watts. Tip diam. 1⅝ in. Ship. wt. 4 lbs. Equal to 5 lb. old style copper ..... each **$16.00**

No. 700. For exceptionally heavy soldering. Suitable for very large branders. 700 Watts. Tip diam. 1¾ in. Ship. wt. 5 lbs. Equal to 7 lb. old style copper ..... each **$30.00**

PLUG TIP IRONS



No. P-30. For extremely light soldering; finest wires, delicate instruments. Also available in 50 or 60 watts. 40 Watts. Tip diam. ¼ in. Ship wt. ⅝ lbs. Equal to ¼ lb. old style copper..each **$5.00**



No. P-70. Light soldering on radio and telephone apparatus, electrical instruments, small fuses; for linemen's tool kits; radio repairs. 80 Watts. Tip diam. ⅜ in. Ship. wt. 1⅛ lbs. Equal to 1 lb. old style copper ..... each **$7.00**

HEXACON ELECTRIC SOLDERING IRONS

Approved by the Underwriters' Laboratories, Inc.

PLUG TIP IRONS
(Continued)



No. P-100. High speed tool for telephone switchboards, electrical instruments, radio apparatus; fast radio repairs and home use. Ideal for radio set manufacturing. For tool kits. 100 Watts. Tip diam. ⅜ in. Ship. wt. 1¼ lbs. Equal to 1½ lb. old style copper .....each **$7.75**



No. P-125. Light tinware, toys, typewriter type bars, light auto repairs, small cans. 130 Watts. Tip diam. ⅝ in. Ship. wt. 1½ lbs. Equal to 2 lb. old style copper .....each **$9.25**



No. P-150. Extra high speed iron for radio set manufacturing and all fast production soldering of electrical apparatus where a light iron with small diameter tip is required. 150 Watts. Tip diam. ⅜ in. Ship. wt. 1¾ lbs. Equal to 2 lb. old style copper .....each **$8.50**

No. P-151. Same as P-150, except where larger tip is desired. 175 Watts. Tip diam. ½ in. Ship. wt. 1¾ lbs. Equal to 2½ lbs. old style copper.....each **$9.00**



No. P-200. Medium tinware, medium cans, auto repairs, light roofing, gutters, medium sheet metal, airplane mfg., building maintenance. Suitable for small branders. 200 Watts. Tip diam. ⅝ in. Ship. wt. 2⅛ lbs. Equal to 2¾ lbs. old style copper .....each **$9.50**

No. P-250. Same as P-200 except where greater speed is required. Used by radio set manufacturers for extra high speed conveyor soldering on heavier joints, and cord set mfgrs. for plug lugs. 250 Watts. Tip diam. ⅝ in. Ship. wt. 2¼ lbs. Equal to 3 lb. old style copper.....each **$10.75**



No. P-300. Heavy tinware, large cans, auto radiators, roofing, refrigerators, galv. iron, gas meters, car building, shipbuilding, auto, airplane and metal boat building. Suitable for medium branders. 300 Watts. Tip diam. ⅞ in. Ship. wt. 2⅞ lbs. Equal to 4 lb. old style copper.....each **$12.50**

HEXACON ELECTRIC SOLDERING IRONS

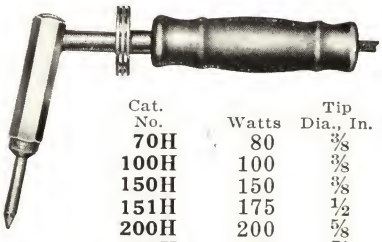
Approved by the Underwriters' Laboratories, Inc.



No. P-550. Auto radiators, copper sinks, roofs, large cans, galv. iron, tanks, auto bodies, fender dents, heavy armatures, milk cans, shipbuilding. Suitable for large branders. 550 Watts. Tip diam. 1⅛ in. Ship. wt. 4⅛ lbs. Equal to 5 lbs. old style copper .....each **$16.50**

HATCHET TYPE IRONS

For same use as Plug Tip irons of equal wattage. Replaceable elements and all other features of Plug Tip irons.



Cat. No.	Watts	Tip Dia., In.	Shpg. Wt. Lb.	Price Each
70H	80	⅜	1⅜	**$ 9.00**
100H	100	⅜	1½	**9.75**
150H	150	⅜	2	**10.50**
151H	175	½	2	**11.00**
200H	200	⅝	2⅜	**11.50**
300H	300	⅞	2⅞	**14.50**

WELLER DUAL SPOTLIGHT SOLDERING GUN

135-WATT WELLER SOLDERING GUN



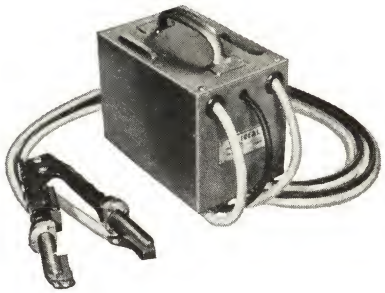
Pull the trigger of your light-duty Weller Soldering Gun, and instantly twin spotlights focus on the job—banish every shadow. Five seconds later the tip is at soldering heat. No waiting. No wasted current. This streamlined 135-watter — newest of the famous Weller line — is fast. Built compactly for working in crowded chassis.

Trigger-switch control; adjusts heat to the job. No need to unplug gun between jobs. Dual Heat—Single heat 100 watts; dual heat 100/135 watts, 120 volts, 60 cycles. Handles all light-duty soldering.

Model No.	Description	Price Each
WS-100	Single Heat, 100 watts.....	**$8.95**
WD-135	Dual Heat, 100/135 watts.....	**10.95**

IDEAL THERMO-GRIP SOLDERING TOOLS

1000 WATT STANDARD MODEL



1000-watt standard model Thermo-Grip is adaptable to practically all soldering jobs—closely grouped parts, difficult positions, cramped spaces, inflammable surroundings. Does all types of soldering quicker, safer and easier. Heats instantly and concentrates heat only on the part to be soldered. Eliminates fire hazard and danger of melting nearby joints or burning other parts. Does not oxidize the tin in solder, weaken the solder, or discolor the finished job. Reaches soldering temperature in less than one minute. Handy thumb-switch permits close heat control for better soldering. All parts fully insulated. Current is reduced to harmless low voltage. Operates on resistance heating principle. Can be used for long periods of time without overheating.

ATTACHMENTS

Plier Attachment (Illustrated above with Power Unit) — for soldering applications — where work may be held in jaws and heated; i.e. removing or applying solder lugs up to 450 amps., sweating and unsweating copper tubing and fittings up to 1¼ inches diameter, soldering wire joints, etc. Carbons are replaceable. Rating: 1000 volt amps.



Pencil Attachment — for spot soldering — where ground clamp may be attached to a metal part of work to complete secondary circuit; i.e. spot soldering, soldering sheet metal, wire joints, commutator risers, etc. Includes "C" type ground clamp. Rating: 600 volt amps.



Fork Attachment—for soldering in restricted spaces — where straight tools cannot be used; i.e. soldering lugs, terminals or connections in switch boxes, switchboards, inside machines, etc. The electrode holders can be turned and locked in any position. Rating: 600 volt amps.

Cat. No.	Description	Wt. Oz.	Price Each
12-106	Complete Unit	....	**$86.90**
12-108	Complete, Less Attachments	....	**74.80**
12-067	Plier Attachment only	13	**23.50**
12-068	Fork Attachment only	6	**26.40**
12-069	Pencil Attachment only	13	**18.50**

IDEAL THERMO-GRIP SOLDERING TOOLS

450 WATT MODEL THERMO-GRIP



Heats ½-inch copper tubing to soldering temperature in 40 seconds using 40-60 solder. Handles solder lugs up to 225 ampere.

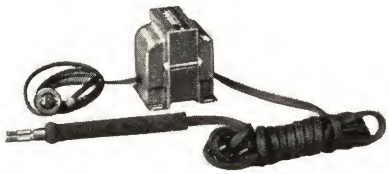
Heats quickly — has thumb-switch for close heat control — modern in design, light weight, compact — can be used with ease and safety on small parts, wires, terminals, lugs, copper tubing up to ¾ inch, etc. Safe — all current carrying parts fully insulated — no open flame.

Attachments—Identical to 1000 Watt Unit except proportionately smaller in size.

When ordering specify (1) Power Unit (2) Secondary Leads (3) Attachments desired.

Cat. No.	Rating	Price Each
12-072	115 v., 50-60 cycle	**$69.90**
12-074	230 v., 50-60 cycle	**75.20**

INSTANT HEAT ELECTRIC SOLDERER

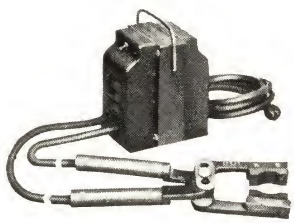


Heats instantly — no pre-heating. Touch work to be soldered and instantly it is brought up to soldering temperature. Complete unit includes transformer with a 6-ft. primary cord, 5-ft. secondary lead and soldering tool.

For light repair work and servicing such as fine instrument work, radio and telephone repairs, soldering small fuses, and similar light duty jobs. For intermittent service only. Weight 2 pounds.

Price, No. **12-005** (115 v., 50-60 cy.)....each **$20.00**

HEAVY-DUTY MODEL THERMO-GRIP

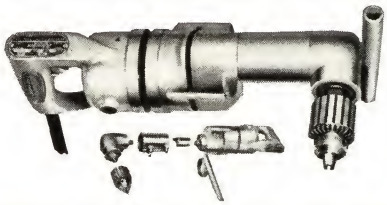


For big soldering jobs. 2500 watt capacity. Complete with pliers for soldering lugs up to 1050 ampere size, making stator connections, sweating and unsweating copper pipe and fittings up to 2½ inches diameter or up to 4 inches diameter with soft solder. Has Hi-Lo heat switch; Hi—2500 watts intermittent, Lo—2125 watts.

Cat. No.	Rating	Price Each
12-048	115 v., 50-60 cycle	**$250.00**
12-049	230 v., 50-60 cycle	**250.00**

Milwaukee ELECTRIC TOOLS

TRI-SPEED S412RAD RIGHT-ANGLE DRILL



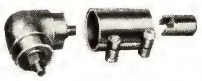
Available in 6 Basic Models with Speed Ranges from 100 to 3000 rpm

This compactly designed, 8-pound portable power tool is ideal for drilling around corners, pipes, conduits, and other hard-to-get-at places — between 12-inch joists, or similar close quarters. Light and powerful, the one-third H.P. Hole Shooter, the S-412, allows operator to maintain normal position at all times — particularly when working in places inaccessible with standard electric drills, or on ladders.

Three job-determined speeds, 300, 450, and 650 rpm, expand the tool's usefulness. Permits operator to select the correct speed for drilling large or small holes in wood, sheet metal, ceramic, glass, or stone composition materials. Motor operates AC or DC, up to 60 cycles, at 115 volts, or special voltages. Ball and roller bearings throughout.

Price, No. **S-412** RAD ½-inch Right-Angle Drill .....each **$69.00**

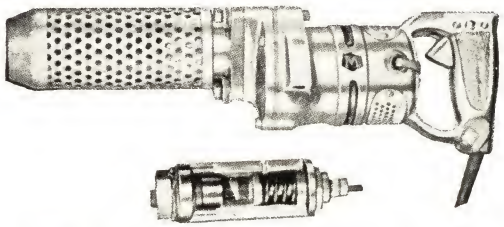
TU-SPEED RIGHT-ANGLE DRIVE ATTACHMENT



Adds two speeds to any Milwaukee Drill listed below. Ideal attachment for use on Drill for drilling in inaccessible places or used with pad substituted for chuck on sanding or polishing operations. Extends length of drill only 2⅝ inches. Attaches to S214, S256, S238, S412, S212 and BF312 drills.

Price, Type **RAD2** Attachment.....each **$24.50**

MILWAUKEE ELECTRIC HAMMER TYPE H-856X



An ideal tool for drilling holes in concrete or brick to accommodate expansion shields. The most powerful and durable small electric hammer ever offered to the trade.

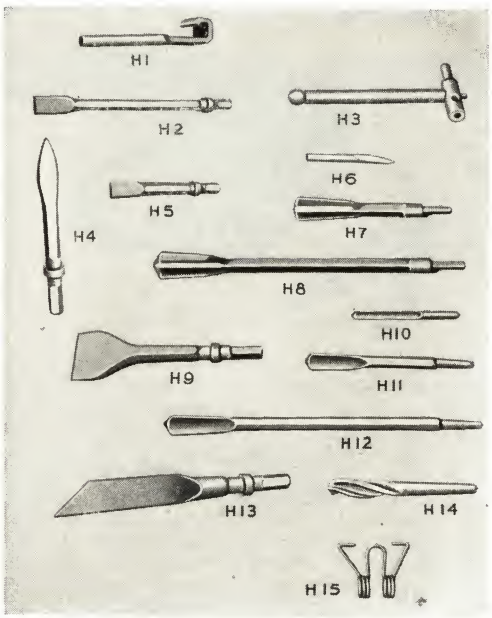
Capacity in concrete: ½-in. holes approximately 4 inches deep in one minute; ¾-in. holes 2 inches deep in one minute; ⅞-in. holes 1-inch deep in one minute. Delivers 3,000 powerul blows per minute.

Furnished complete with special taper tool chuck, one ½-inch Star drill, one drift key, one open end wrench, one tool retainer for chisels, carrying case, and 12 feet 3-wire Super Service cable equipped with third wire for grounding purposes.

Price, Type **H-856X** Electric Hammer (115 volts) .....each **$98.00**

For other voltages, add **$3.00.**

Milwaukee HAMMER ACCESSORIES



Indicative of the broad applications for the Milwaukee H-856X Electric Hammer is this assortment of cutting, drilling and chipping tools. The various hammer tools and their uses:

No. H1 —Turning Handle	$1.25
No. H2 —Cold Chisel, ⅝" x 12"	3.75
No. H3 —Star and Hammertwist Drill Chuck	3.75
No. H3a—No. 14 Rawldrill Chuck (for Rawldrills No. 6 to No. 14)	3.75
No. H3b—No. 20 Rawldrill Chuck (for Rawl drills No. 16 to ⅞")	3.75
No. H4 —Bull Point	2.95
No. H5 —Cold Chisel, ⅝" x 7"	2.95
No. H6 —Drift Key	.30
No. H9 —Brick Cleaning Chisel	2.95
No. H13—Mortar Cutting Chisel	2.95
No. H15—Tool Retaining Spring	1.50
Special hammer cylinder grease (1 lb. can)	.75
Special gear case grease (per 1 lb. can)	.75

H14 HAMMERTWIST DRILLS

3/16"x5"	$0.90	3/8"x5"	$1.25	9/16"	$1.90
1/4"x5"	1.00	7/16"x5"	1.70	5/8"	2.00
5/16"x5"	1.10	1/2"x5"	1.80		

H3 Chuck required.

H10, H11, H12 RAWLDRILLS

H10

No. 6—5/32"	$0.75	No. 12—1/4"	$0.80
No. 8—11/64"	.75	No. 14—9/32"	.85
No. 10—3/16"	.75		

H3a Chuck required.

H11		H12	
No. 16—5/16"	$1.00	3/4" x 6"	$1.65
No. 20—3/8"	1.10	7/8" x 6"	1.75
7/16" x 6"	1.15	7/16" x 12"	1.40
1/2" x 6"	1.25	1/2" x 12"	1.40
9/16" x 6"	1.35	5/8" x 12"	1.65
5/8" x 6"	1.35	3/4" x 12"	1.85
11/16" x 6"	1.65	7/8" x 12"	2.30

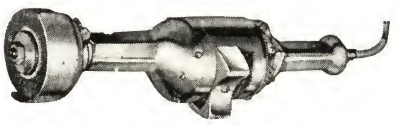
H3b chuck required.

H7, H8 STAR DRILLS

Diam.	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1 1/8"
Taper Shank, 6" Long—H7									
Price	$0.95	$0.90	$0.90	$0.85	$0.85	$1.00	$1.00	$1.10	$1.25
Differential Shank, 12" Long—H8A									
Price	3.40		3.25		3.20	3.25	3.50		

Milwaukee PORTABLE ELECTRIC GRINDERS

Universal Motor, A.C. or D.C. — 25, 40, or 60 Cycles — 32, 115, 230, or 250 Volts



Type V-194

Type V-194 4-Inch Heavy Duty

Small and light weight, but of rugged construction for continuous operation. Wheel size, 4 x 1 inches with ½-inch hole. No load speed, 6000 r.p.m. Length overall, 20 inches. Full ball bearing. Fan cooled motor. Forefinger control, automatic release, fully-enclosed, double pole, safety type, dead-man switch.

Equipped with adjustable steel guard and one grinding wheel. Supplied with 3-wire heavy duty rubber covered cable, permitting ground connection to prevent possible shock.

Net weight, 14 pounds; shipping weight, 16 lbs.

Type **V-194**, 115 volts.....each **$66.00**

Other voltages, add **$3.00.**

Type V-195 5-Inch Heavy Duty

For continuous hard usage such as snagging castings, grinding off welds, wire brushing, buffing, or polishing operations on metal surfaces.

Fan cooled motor. Forefinger control, automatic release, fully-enclosed, double pole, safety type, dead-man switch.

Equipped with adjustable steel guard and one grinding wheel. Supplied with 3-wire heavy duty rubber covered cable, permitting ground connection.

Wheel size, 5 x 1 inches with ⅝-inch hole. No load speed, 4400 R.P.M. Length overall, 22½ inches. Full ball bearing.

Net weight, 19 lbs.; shipping weight, 21 lbs.

Type **V-195**, 115 volts.....each **$78.00**

Other voltages, add **$3.00.**

Type V-196 6-Inch Heavy Duty

For continuous production work.

Wheel size, 6 x 1 inches with ⅝-inch hole. No load speed, 4400 R.P.M. Length overall, 22½ inches. Full ball bearing.

Fan-cooled motor. Forefinger control, automatic release, fully-enclosed, double pole, safety type, dead-man switch.

Equipped with adjustable steel guard and one grinding wheel. Supplied with 3-wire heavy duty rubber-covered cable, permitting ground connection.

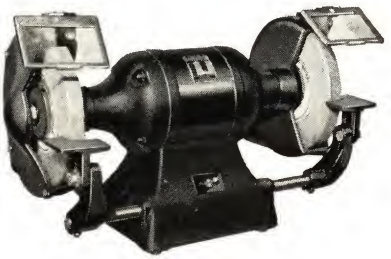
Net weight, 21 lbs.; shipping weight, 23 lbs.

Type **V-196**, 115 volts.....each **$88.00**

Other voltages, add **$3.00.**

Milwaukee ELECTRIC GRINDERS

BENCH TYPE — BALL BEARING



Type SB-113

Type V-141 6-Inch Bench Grinder

¼ Hp. Motor, 3440 RPM

Wheel size 6x¾x½-inch hole. Split-phase motor enclosed to prevent entry of dust, dirt, and emery. Tool rests fully adjustable. Right hand spindle, threaded for ½-inch—20 standard 3-jaw chuck. Furnished with medium and coarse wheels.

Type **V-141**, 115 volt, 60 cycle single phase **$39.95**

Type SB-113 6-Inch Heavy Duty

⅓ Hp. Motor, 3450 RPM

Wheel size 6 x ¾ inches with ½-inch hole.

Split-phase motor fully protected from dust and dirt. 10-ampere heavy duty On and Off type switch.

Furnished with two grinding wheels, one fine and one medium; adjustable tool rests; No. 16 all rubber cord and plug.

Shipping weight, 77 pounds.

Type **SB-113**, 110 or 220 V. 50-60 Cy., Single Phase **$59.50**
220 Volts 50 or 60 Cycles, 3-Phase..... **62.50**
D.C., 32, 110-150-230 or 250 Volts..... **69.50**
Shatterproof Eyeshields, per pair..... **2.50**

Type KB-119 7-Inch Heavy Duty

½ Hp. Motor, 3450 RPM

For heavy production work.

Wheel size, 7 x 1 inches with ⅝-inch hole.

Full capacitor start and capacitor run type of motor, fully enclosed. 10-ampere On and Off type switch.

Furnished with two grinding wheels, one fine and one medium; two-way adjustable tool rests; No. 16 all rubber cord and plug.

Shipping weight, 100 pounds.

Type **KB-119**, 110 or 220 V. 50 or 60 Cy., Single Ph. **$79.50**
220 Volts 50 or 60 Cycles, 3-Phase..... **82.50**
D.C., 32, 110-150-230 or 250 Volts..... **89.50**
Shatterproof Eyeshields, per pair..... **2.50**

Type 3B125 10-Inch Heavy Duty

1 Hp. Motor, 1450 RPM

Wheel size, 10 x 1 inch with ¾-inch hole.

Powerful capacitor start and run type motor, fully enclosed. On and off type switch.

Furnished with two 10x1-inch balanced wheels, one fine and one medium. Two way adjustable tool rests, and exhaust chutes.

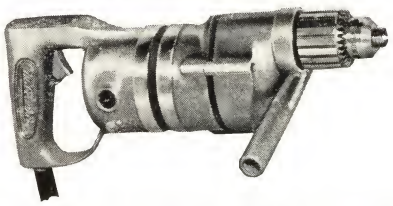
Shipping weight, 190 pounds.

Type **3B125**, 220 V. 50-60 Cycles, 3-Phase **$123.00**
Shatterproof Eyeshields, per pair..... **2.50**

Milwaukee "HOLE-SHOOTER" PORTABLE ELECTRIC DRILLS

Light Weight Powerpacked Portable Electric Drills ¼ to ½ Inch Capacity

½-INCH ELECTRIC DRILL

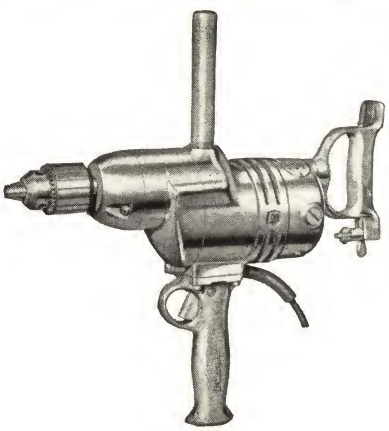


The same rugged design may be instantly recognized by a glance at any Milwaukee Portable Electric Tool. "More power per pound," so essential in a portable tool is embodied in each and every machine. Sturdily built with ball or roller bearing construction in all tools. A complete line of small drills up to and including the **smallest and lightest** ½-inch electric drill on the market, having the most power for its small size and light weight.

Type	Size Inch	Description	Price Each
S-114	¼	Standard Heavy Duty	**$29.95**
S-214	¼	Production Heavy Duty	**44.00**
HS-114	¼	High Speed	**36.00**
S-256	5/16	Production Heavy Duty	**46.00**
S-238	⅜	Production Heavy Duty	**49.50**
BF-312	½	Special Duty	**39.50**
S-412	½	Slo-Speed Heavy Duty	**44.50**
S-212	½	*Veri-Slo-Speed (used with Carbide Bits)	**49.50**

*Hold to 150 R.P.M. when using Carbide Bits.

HEAVY DUTY ELECTRIC DRILLS



Milwaukee Electric Drills in the larger sizes from ½ to ¾-inch equipped with heavy duty 3-jaw geared nut chucks for straight shank drills and ⅞-inch equipped with No. 2 Morse Taper Socket for larger diameter drills with taper shanks are the most rugged and powerful for their size and light weight.

Type	Size Inch	Description	Price Each
C-312	½	Standard Heavy Duty	**$58.00**
C-313	½	Production Heavy Duty	**74.00**
D-458	⅝	Standard Heavy Duty	**69.50**
D-459	⅝	Production Heavy Duty	**84.00**
E-534	¾	Standard Heavy Duty	**79.50**
E-535	¾	Production Heavy Duty	**94.00**
K-978	⅞	Production Heavy Duty	**94.00**

Milwaukee "HOLE-SHOOTER" PORTABLE ELECTRIC DRILLS

"HOLE-SHOOTER" PISTOL DRILL



The only Pistol Drill with a motor that will develop ⅛ H.P. The only Pistol Drill with easily accessible brushes and commutator. The only Pistol Drill where you can inspect the motor while in operation. The motor is set well back towards the handle giving better balance and less fatigue to the operator. Air intake is in a position where it will not be blocked by the operator's hand, assuring a cool running tool even on production work. For heavy duty or casual use this Pistol Drill will outperform any other similar tool now on the market.

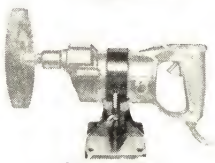
Other features include Jacobs 3-jaw geared chuck, cord clamp, 3-wire rubber jacket cord, which can be grounded for safety, 2 pole safety release locking switch, anti friction ball and roller bearings throughout, helical cut gears for quieter operation.

115-volt AC or DC Universal Motor.

Model No.	Chuck Speed No Load	Capacity in Inches	Price Each
1-A	650 r.p.m.	⅜	**$46.00**
2-A	1000 r.p.m.	5/16	**44.00**
3-A	2000 r.p.m.	¼	**39.50**
4-A	3500 r.p.m.	¼	**39.50**
5-A	5000 r.p.m.	¼	**39.50**

Voltages other than 115 are **$3.00** extra.

Milwaukee DRILL STANDS



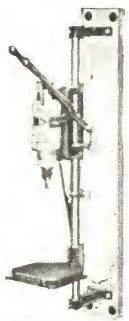
Type A-25



Type R-31



Type R-600



Type R-900

R-31 Bench Drill Stand (For S-114, HS-114, S-214, S-256, S-238, S-212, S-412, BF-312 and old models, A-114, B-257, and B-239 **$19.50**

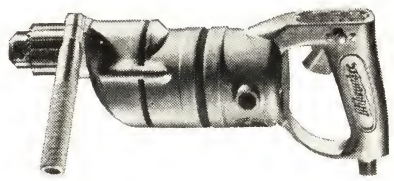
A-25 Bench Base (same group of tools as R-31) **4.75**

R-600 Bench Model for Types C-312 and C-313 ½-inch Drills, Types D-458 and D-459 ⅝-inch Drills, Types E-534 and E-535 ¾-inch Drills or K-978 ⅞-inch Drill (without Drill) **36.00**

R-900 Wall Model Drill Stand (For same Drills as listed for R-600 Bench Drill Stand above) Without Drill **39.00**

DYNA-FLASH ELECTRIC TOOLS

MODEL 12D ½-INCH DRILL

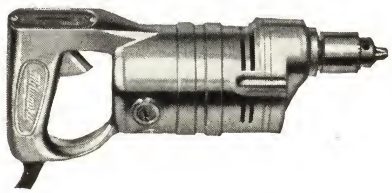


An unparalleled combination of power, quality, speed and size. Sells for less than other ½-inch drills that are larger and harder to handle. 1/3 H.P. motor. All shafts run on ball or roller bearings. Length, 12¾ inches overall.

Motor: 115 volts AC or DC. Detachable side handle can be clamped in any position for right or left hand operation. Heavy duty cord. Jacobs 3-jaw geared chuck.

Cat. No.	Capacity Steel	Capacity Wood	Free Speed	Full Load Speed	Wt.Lbs. Each	Price Each
12D	½"	1½"	550 rpm	330 rpm	6½	**$44.95**

MODEL 14D—¼-INCH DRILL



Most powerful ¼-inch drill in its price class — ¼ H.P. motor. Heavy duty construction — every bearing ball or roller type. No bronze or plain sleeve bearings to replace. A power-packed tool that is light in weight, small, well balanced, and easy to handle. Motor: 115 volt AC or DC. 10½ inches overall length. Jacobs 3-jaw geared chuck.

Cat. No.	Capacity Steel	Capacity Wood	Free Speed	Full Load Speed	Wt.Lbs. Each	Price Each
14D	¼"	½"	1900 rpm	1100 rpm	5½	**$33.95**

MODEL DF24 DRILL STAND

For Models 14D and 12D Drills

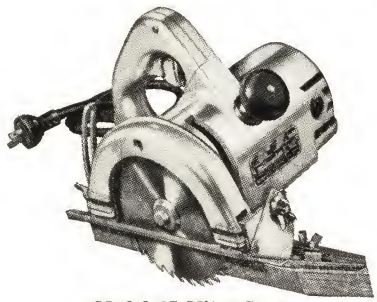


This stand equips the shop with an accurate Drill Press without sacrificing the portability of the Dyna-Flash Drill. Drills to the center of an 11-inch circle. Depth gauge allows drilling any number of holes the same length. Feed is 3 inches and maximum clearance from chuck to cast iron base 13 inches. Ground tubular steel column gives great strength.

Price, Model **DF24** Drill Stand, less drill.....**$22.75**

DYNA-FLASH ELECTRIC TOOLS

DYNA-FLASH 6-INCH MITERING SAW



Model 6S Miter Saw

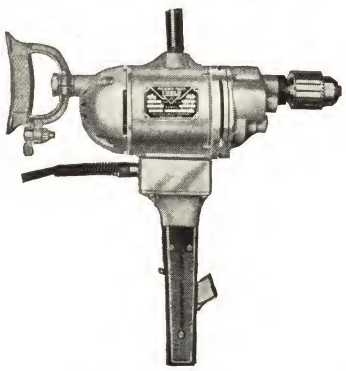
Bevel cuts 1⅜ inches at 45 degrees. Depth gauge adjusts from zero to a full 2-inch straight cut. Rip guide, telescoping guard, full-view line sight, sawdust blower, helical gears, standard round hole blade, ball and roller bearings throughout. Knob grip for vertical and overhead work. Motor, 1 H.P., AC or DC, 115 volts. Free speed, 4800 R.P.M.

Model	Description	Price Each
6S*	Complete with mitering shoe, rip guide, and depth gauge.....	**$64.50**
6SP	6-inch cut-off saw.....	**58.00**

*Only the Model 6S is equipped with depth gauge, rip guide, miter shoe. Carrying Case **$5.00** extra when purchased with saw.

MILLER FALLS ELECTRIC DRILLS

⅝-INCH HEAVY DUTY ELECTRIC DRILL



Universal motor, A.C. or D.C. up to 60 cycles. Capacity in steel, ⅝-inch; in hardwood, 1-inch.

Jacobs geared chuck. Heat treated gears, pinions and spindles. Ball thrust bearing on spindle. Ball bearing motor. Bronze spindle bearings. Trigger switch with catch for continuous operation. Armored plug and 10 feet of rubber covered cord.

Cat. No.	No Load Speed	Lgth. In.	Wt. Lbs.	Price Each 100 Volts
658B	457	19¼	20	**$100.00**

⅞-INCH HEAVY DUTY ELECTRIC DRILL

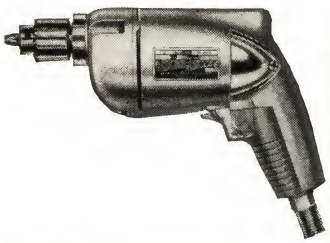
A powerful machine with universal motor for A.C. or D.C. up to 60 cycles. Equipped with a No. 3 Morse Taper Socket instead of a chuck for using taper shank drills.

Heat treated chrome nickel gears, pinions and spindles. Ball motor and thrust bearings. Bronze Timkin roller spindle bearings. Armored plug and 10 feet of rubber covered cord.

Cat. No.	No Load Speed	Lgth. In.	Wt. Lbs.	Price Each 110 Volts
801	275	23¼	24¼	**$130.00**

MILLER FALLS ELECTRIC DRILLS

"DYNO-MITE" PRODUCTION DRILLS

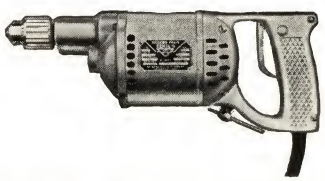


No. 220 drill is recommended for general service in steel while the high speed models are ideal for drilling small diameter holes in non-ferrous metals with minimum burr. The slower speed, high torque models are recommended for stainless and the hard alloy steels and full chuck capacity in non-ferrous metals.

Cat. No.	Capacity: Chuck	Steel	Non-Ferrous	No Load Speed	Length Overall	Wt. Lbs. Each	Price Each
220	1/4	1/4	1/4	1700	8 7/8	3	**$42.00**
225	1/4	3/16	1/4	2500	8 7/8	3	**42.00**
230	1/4	5/32	1/4	3500	8 7/8	3	**42.00**
235	1/4	1/8	1/4	5000	8 7/8	3	**42.00**
240	5/16	5/16	5/16	800	9 5/8	3 1/2	**48.00**
245	5/16	5/16	5/16	500	9 5/8	3 1/2	**48.00**
250	3/8	3/8	3/8	800	10 1/8	4	**50.00**
255	3/8	3/8	3/8	500	10 1/8	4	**50.00**
1090	Universal right angle drive attachment						**26.00**

For Nos. 220, 225, 230, 235, 240 and 245.

1/4-INCH STANDARD ELECTRIC DRILLS

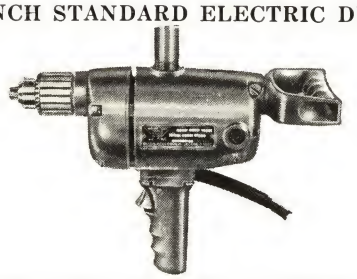


Universal motor, operates on direct or alternating current circuits up to 60 cycles. Capacity in steel, 0 to 1/4-inch; in cast iron, 0 to 5/16-inch; in wood, 0 to 3/8-inch.

Jacobs heavy duty chuck. Heat treated alloy steel gears. Ball thrust bearing on spindle. Armature mounted on high grade ball bearings. Automatic switch mounted on handle.

Cat. No.	No Load Speed	Lgth. In.	Wt. Lbs. Each	Price Each 110-Volt	Price Each 220-Volt
414	1800	12	5 1/2	**$45.00**	**$45.00**

3/8-INCH STANDARD ELECTRIC DRILL



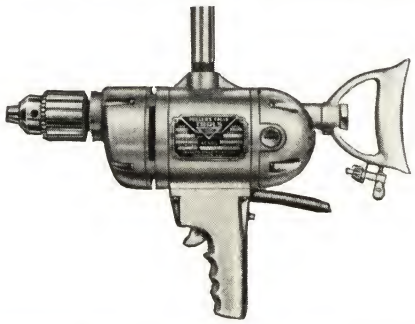
Universal motor, operates on direct or alternating current up to 60 cycles. Capacity in steel, 3/8-inch; in hard wood, 5/8-inch.

3/8-inch Jacobs chuck. Heat treated alloy steel gears. Ball thrust bearing on spindle. Ball bearing motor shaft. Phosphor bronze bushings. Double-pole, double-break, safety switch with catch for continuous operation. Armored attachment plug. 10-foot rubber covered cord. Adjustable spade handle and breast plate. Can be furnished with auxiliary side handle if desired.

Cat. No.	No Load Speed	Lgth. In.	Wt. Lbs. Each	Price Each 110-Volt	Price Each 220, 250, 32-Volt
438	900	14	9 1/2	**$60.00**	**$60.00**

MILLER FALLS ELECTRIC DRILLS

1/2-INCH HEAVY DUTY ELECTRIC DRILL

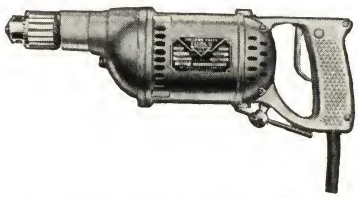


Universal motor, operates on direct or alternating current up to 60 cycles. Capacity in steel, 1/2-inch; in hard wood, 3/4-inch.

1/2-inch Jacobs chuck. Equipped with detachable auxiliary side handle, and adjustable combination spade handle and breast plate.

Cat. No.	No Load Speed	Lgth. In.	Wt. Lbs. Each	Price Each 110-Volt
3012	500	17	14	**$77.00**

5/8-INCH HEAVY DUTY ELECTRIC DRILL

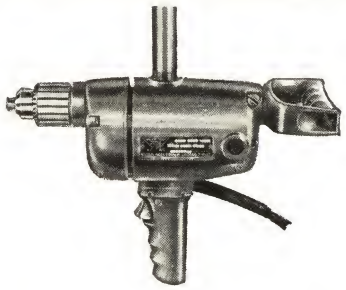


Universal motor, operates on A.C. or D.C. up to 60 cycles. Capacity in steel, 5/8-inch; in hard wood, 7/8-inch.

Jacobs chuck. Heat treated alloy steel gears. Ball bearing motor and thrust bearings. Ball bearing spindle. Switch, automatic double pole trigger type with catch for continuous operation. Armored plug with 10 feet of rubber covered cord.

Cat. No.	No Load Speed	Lgth. In.	Wt. Lbs.	Price Each 110 Volts
516	1500	14	7 1/2	**$54.00**

1/2-INCH STANDARD ELECTRIC DRILL



Universal motor of A.C. or D.C. up to 60 cycles. Capacity in steel, 1/2-inch; in hard wood, 3/4-inch.

Jacobs geared chuck. Gears, pinion and spindle chrome nickel steel, heat treated. Ball bearing motor and thrust bearings. Armored plug and 10 feet rubber covered cord. Automatic trigger switch with catch for continuous operation.

Cat. No.	No Load Speed	Lgth. In.	Wt. Lbs.	Price Each 110 Volts
512	525	14	9 1/2	**$60.00**

MILLERS FALLS TOOLS

No. 1950 M-F RATCHET BRACE



A new popular priced brace with high quality features, and striking appearance. Head and sweep handles are of glossy red "Tenite" — a plastic unbreakable in use. Steel clad, ball bearing head. Semi-boxed steel ratchet operated by large knurled shifter ring. Standard Barber pattern chuck with forged steel jaws. All exposed metal parts heavily nickel plated and highly buffed.

Cat. No.	Sweep Inches	Std. Pkg.	Wt. Lbs. Each	Price Each
1950	10	4	2½	**$4.80**

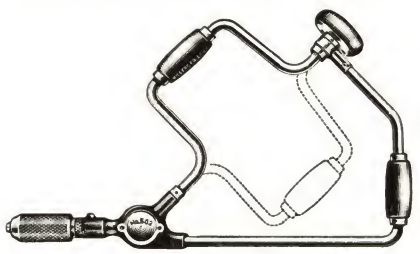
No. 1708 M-F RATCHET BRACE



A low priced brace with Barber chuck with alligator jaws and semi-boxed ratchet. Steel clad, ball bearing head. Head and handle mahogany finished hardwood. Exposed metal parts nickeled and buffed.

Cat. No.	Sweep Inches	Std. Pkg.	Wt. Lbs. Each	Price Each
1708	8	6	2½	**$4.20**
1710	10	6	2½	**4.20**
1712	12	6	2¾	**4.55**

No. 502 M-F CORNER BRACE

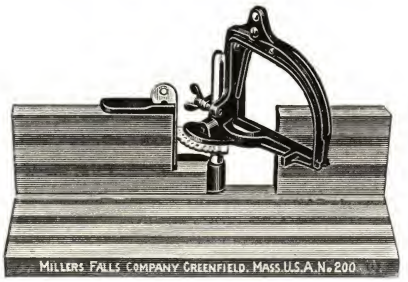


A fine tool for boring in corners, against walls and beams and similar locations. Master chuck holds round, square and No. 1 M. T. shanks. Ball thrust bearing at chuck. Black enameled frame. Other exposed metal parts nickeled and buffed. Machine cut steel gears. Mahogany finished hardwood head and handle.

Cat. No.	Sweep Inches	Std. Pkg.	Wt. Lbs. Each	Price Each
502	10	2	4	**$12.80**

MILLERS FALLS TOOLS

No. 200 M-F MITRE BOX



Frame of laminated wood dowelled for strength. Takes back or panel saw. Thumb screw adjustment and angles and heights. Index plate marked for six most used angles, with notches and slide key to lock guide quickly and positively in place. With a back saw exact depths can be sawed by adjusting saw guide on posts to desired height. Packed one in a carton. Weight 6 lbs.

Price, No. **200** Mitre Box.....each **$12.00**

No. 590 TORPEDO LEVEL



One 45° plumb, one 90° plumb and one level. Body is die cast, glossy black Bakelite. Top plate is a heavy piece of polished "nickeloid" setting flush with body giving protection to level glass. Two plumb, one 45° and one 90°, and one level vial are provided, all of the cat's-eye type. The bottom has a V-groove running its entire length. packed one in a box. Size 9x1¼x¾ inches.

Price, No. **590** Torpedo Level.....each **$1.80**

ALUMINUM LEVELS



The frame of these levels is die cast aluminum designed to give maximum strength and rigidity with minimum weight. Round white openings with glass protection for vials, giving clear vision and luminosity. Leveling surface accurately milled. Two level and four plumb vials.

Cat. No.	Dimens., Inches	Wt.Lbs. Each	Price Each	Cat. No.	Dimens., Inches	Wt.Lbs. Each	Price Each
618	18x2¼x1⅛	1¾	**$5.70**	**628**	28x2¼x1⅛	2½	**$7.00**
624	24x2¼x1⅛	2	**6.50**	**630**	30x2¼x1⅛	2¾	**7.40**

M-F WOOD LEVELS



Made from a plain piece of straight grained white pine, thoroughly seasoned and finished with three weather-proof coats of red lacquer. White, glass protected openings for vials. With one level and one plumb vial. Packed one in a box.

Cat. No.	Dimens., Inches	Wt.Lbs. Each	Price Each	Cat. No.	Dimens., Inches	Wt.Lbs. Each	Price Each
312	12x2½x1¼	1	**$2.50**	**328**	28x1¼	1½	**$3.40**
318	18x2½x1¼	1	**2.80**	**330**	30x1¼	1½	**3.50**
324	24x2½x1¼	1½	**3.20**	------	----------	----	--------

MILLERS FALLS TOOLS

No. 185A M-F AUTOMATIC DRILL



A world famous drill with every desirable feature—sturdy, smooth acting and long lived. Front portion is made of hollow brass tubes with carefully machined spiral which runs through a spiral in a hard bronze center nut. Knurled magazine type handle with individual compartments for eight drill points, indexed for size. Drill points removed by rotating hole in cap and tipping out size desired. Quick action chuck positively seats and locks drill points. Entire tool polished, nickel plated and highly buffed. Eight new style (401) drill points, 1/16 to 11/64 inch diameter, regularly furnished. Length, 10 inches. Packed one in a box.

Price, No. **185A** Automatic Drill.....each **$5.00**

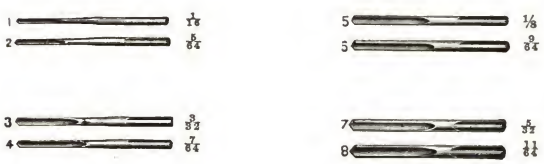
No. 188A M-F AUTOMATIC DRILL



Built to provide an efficient drill for the home at a reasonable price. Drills eight different size holes quickly and easily in hard and soft wood, soft metals, wallboard, plaster, etc. The eight drill points are in numbered compartments in the handle, locked in safely until wanted. To remove drill, push lock button which controls cap and tip out the drill desired. Drill held in four-jawed chuck when in use, and is operated by simply pushing down on handle. Handle is jet black molded bakelite. All exposed metal parts nicely polished and nickel plated. Eight fluted shank drill points, 1/16 to 11/64 inch diam. furnished. Length, 9⅝ inches. Packed one in a box.

Price, No. **188A** Automatic Drill.....each **$3.80**

M-F FLUTED SHANK DRILL POINTS



These drill points have fluted shanks for use in the four-jawed chucks of automatic drills. They are manufactured from the finest grade of tool steel, are very carefully hardened and oil tempered. The straight flutes are very desirable for drilling wood or soft metals. Length overall, about 2 inches. Packed one dozen or one set in a vial.

Price, No. **402**—per doz. **$1.50**; per set, **$1.10**

MILLERS FALLS TOOLS

No. 100 AUTOMATIC DRILL



A beautiful new automatic drill with a bright red plastic barrel in the magazine handle which holds eight fluted shank drill points 1/16 to 11/64 inch in diameter. All exposed metal parts either highly buffed aluminum or nickeled and buffed. Operating mechanism the same time-tested design that has made Millers Falls Automatics outstanding.

Regular equipment eight fluted drill points 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32 and 11/64 inch in diameter can be selected by size, or number through the hole in the rotating cap. Length, 9⅛ inches. Packed one in a box.

Price, No. **100** Automatic Drill.....each **$4.00**

No. 1006 DISPLAY UNIT



Here is another compact, colorful, attention compelling display that will make the No. 100 Anniversary Automatic Drill the fastest selling item in your Tool Department. The solid wood base and composition panels give it stability and ruggedness. Nicely lacquered and silk-screened in red, black, gray and white. Requires less than one half square foot of counter space.

Drills are easily removable from the adjustable metal clips so your customers can get them into their hands, inspect and operate them and that's all that is necessary to sell them.

Width 11 inches; depth 4½ inches; height 9½ inches. Shipping weight complete with drills 5 lbs. Packed one unit in a carton.

Price, No. **1006** Display Unit complete with 6 No. 100 Automatic Drills.....each **$24.00**

M-F NEW STYLE DRILL POINTS

For Use in M-F and Some Other Makes of Automatic Drills



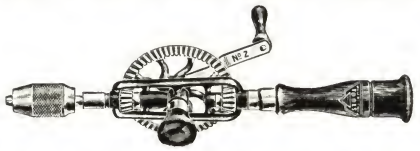
These drill points are of the new pattern which seat and lock positively in the chuck when the chuck nut is tightened. Number and diameter of each drill stamped on shank. Made of fine grade tool steel, carefully hardened and oil tempered. The straight flutes are very desirable for drilling wood and soft metals.

Length overall, about 2 inches. Packed one dozen or one set in a vial.

Price, No. **401** — per doz., **$1.70**; per set, **$1.20**

MILLERS FALLS TOOLS

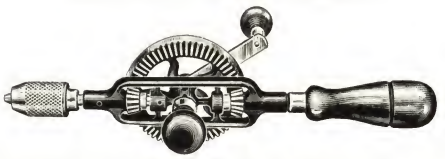
Nos. 2 and 2B M-F HAND DRILLS



A strong, serviceable tool built on a sturdy iron frame. Three-jawed chuck with protected springs holds 0 to ⅜ inch round shanks. Gear ratio 4½ to 1. Ball thrust bearing spindle. Two steel pinions, one drive and one idling equalizer. Frame black enameled. Large gear red enameled with nickeled rim. Exposed metal parts nickel plated and buffed. Tropical hardwood end handle with screw cap. Eight drill points, 1/16 to 11/64 inch in diameter, regular equipment with No. 2. No. 2B is exactly the same as No. 2 but with solid mahogany finished hardwood end handle. Packed one in a box.

Cat. No.	Capacity Inch	Length Inches	Wt. Lbs. Each	Price Each
2	⅜	14½	2½	**$7.00**
2B	⅜	15	2½	**6.50**

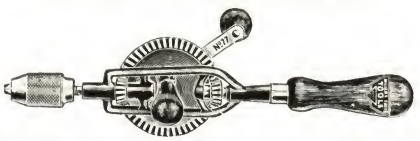
No. 5 M-F HAND DRILL



Equipped with wide nickel plated rim on large gear for starting small drills on delicate work. Large gear red enameled. Steel drive and equalizing pinions. Three jawed chuck holds 0 to ¼ inch round shank drills. Black enameled malleble iron frame. Other metal parts nickeled. Hollow tropical hardwood end handle containing eight drill points 1/16 to 11/64 inch. Length 12⅞ inches. Packed one in a box.

Price, No. **5** Hand Drill.....each **$6.70**

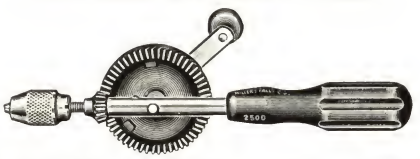
No. 77A M-F HAND DRILL



The black enameled frame on which this drill is built is malleable iron. The chuck has three jaws with protected springs and holds 0 to ¼ inch round shank drills. The crank and end handle are mahogany finished hardwood. Two steel pinions. Ball thrust bearing on spindle. Large gear red enameled. Other parts nickeled. Capacity, ¼ inch. Length 12½ inches. Packed one in a box.

Price, No. **77A** Hand Drill.....each **$3.30**

No. 2500B M-F HAND DRILL

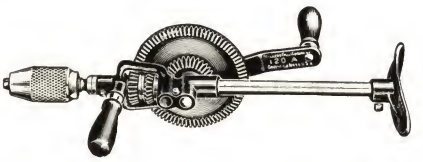


Solid steel frame. Single speed. Cut gears and equipped with three jawed chucks that hold 0 to ¼ inch round shanks. Large gear, red enameled. Hardwood mahogany finish handles. Length 10⅝ inches. Packed one in a box.

Price, No. **2500B** Hand Drill.....each **$2.30**

MILLERS FALLS TOOLS

Nos. 119A and 120B M-F BREAST DRILLS



A fine value at a very low price. Strong black enameled frame and breastplate connected by a steel shank. Two speeds with ratios of 3 to 1 and 1 to 1. Steel pinions. Ball thrust bearing on spindle. No. 120B has three-jaw chuck with protected springs and a capacity of 0 to ½ inch round shank drills. No. 119A has a two-jawed chuck that holds ⅛ to ½ inch round #1 M.T. and regular square bit brace shanks. Packed one in a box.

Cat. No.	Capacity	Length Inches	Wt. Lbs. Each	Price Each
119A	Universal	18¼	5	**$7.50**
120B	½ inch	16½	4⅝	**7.50**

No. 1 M-F TURRET HEAD GLASS CUTTER



The original turret head cutter famous for high grade, low cost performance. Turret turned from solid bar of selected steel wiith six wheel axles integral parts of the turret. Carefully heat-treated and rust-proofed by Udelyte process for long life. Six tested wheels mounted on turret axle which is numbered so wheels can be used successively. Hardwood handle comfortably shaped and finished in mahogany lacquer. Nickeled frame and ferrule. Length, 5⅜ inches. Packed one in a box; 12 boxes in a display carton.

Price, No. **1** Glass Cutter.....per doz. **$7.50**
Extra Wheels, per doz. **$1.00.**

No. 444 M-F GLASS CUTTER



The handle on this cutter is designed so that it can be used for hours without fatigue or discomfort. It drops naturally into position between the first two fingers. Equipped with a tested wheel set in a well polished frame with three machined (not cast) breaker notches. The finger-fit handle is finished in bright blue lacquer with red tip. Length 5¼ inches. Packed one in a carton; one dozen cartons in a box.

Price, No. **444** Glass Cutter.....per doz. **$3.60**
Extra Wheels, per doz. **$1.50.**

M-F PLUMB BOBS



Turned from solid steel stock. Points sharp and hardened. Well finished. Hangs true. Packed six in a box.

Cat. No.	Lgth. Inches	Wt.Oz. Each	Price Each	Cat. No.	Lgth. Inches	Wt.Oz. Each	Price Each
1	2¾	3	**$0.50**	**3**	4	9	**$0.80**
2	3½	6	**.60**	**4**	5	14	**1.00**

MILLERS FALLS TOOLS

No. 460 M-F CENTER PUNCH



A square head punch made of good quality steel with finely knurled body. Point and head carefully hardened and tempered and nicely polished. Body 5/16 inch; length 4 inches. Packed one dozen in a box. Weight per doz. 17 oz.

Price, No. **460** Center Punch.....per doz. **$3.00**

M-F MOLYBDENUM NAIL SETS



The most successful nail set ever produced. Point and body are made of molybdenum alloy steel, heat treated to make the toughest, most serviceable set ever made. Carefully cupped points. New deep knurling. Square, no roll head. Points and heads polished. Weight one pound per box.

Cat. No.	Point	Std. Pkg.	Price Per Doz	Cat. No.	Point	Std. Pkg.	Price Per Doz.
801	1/32"	12	**$3.00**	**804**	4/32"	12	**$3.00**
802	2/32"	12	**3.00**	**805**	5/32"	12	**3.00**
803	3/32"	12	**3.00**	.....	.....	....	.....
815	Asst.—2–1/32", 4–2/32", 4–3/32", and 2–4/32"						**3.00**

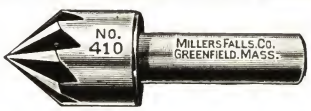
No. 365 M-F SCRATCH AWL



Hammer forged tool steel blade carefully hardened, tempered and polished. Blade runs clear through handle and locks into steel head set flush in the end of the handle, which is natural lacquer finished birch. Deep flutes give a good handle grip. Length of blade is 3½ inches. Length overall 6¾ inches. Weight each 3 ounces. Packed 6 in a box.

Price, No. **365** Scratch Awl.....per doz. **$9.00**

No. 410 M-F ROSE COUNTERSINK



Fitted with a ¼ inch round shank for use in the three jawed chucks of hand, breast and electric drills. Made of fine quality steel carefully hardened and tempered for use in iron and steel. Cutting edges are clean and sharp. Diameter ½ inch; length 1¾ inches. Packed one dozen in a box. Weight box 9 oz.

Price, No. **410** Rose Countersink.....per doz. **$5.00**

No. 396 M-F COUNTERSINK



Forged from a fine grade of tool steel with keenly milled cutting heads and well formed bit brace shanks. Carefully hardened and tempered.

Cat. No.	Diameter Inches	Length Inches	Per Box	Price Per Doz.
396	½	4¼	6	**$9.60**
396	⅝	4¼	6	**9.60**
396	¾	4¼	6	**9.60**

MILLERS FALLS TOOLS

No. 4100 DISPLAY UNIT COUNTERSINKS AND SCREW DRIVER BITS



A bright, very substantial unit that displays these small tools to excellent advantage and originates many sales.

The base is made of solid pine and the upright panel of masonite. It is lacquered and silk screened in three colors, red, gray, and black.

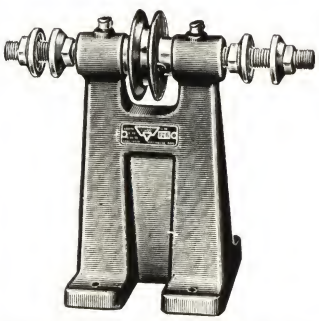
Base 5 in. by 6¾ in; Height 9 in.

Suppied entirely free with the following assortment:

6 No. 410 Countersinks
4 No. 394 Countersinks
2 No. 396 ¾" Countersinks
3 No. 396 ⅝" Countersinks
3 No. 396 ½" Countersinks
6 No. 351 Ass't Screw Driver Bits

Price, No. **4100** Display Unit.....each **$14.70**

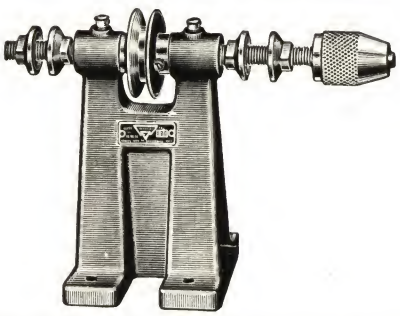
No. 120 M-F GRINDING HEAD



Stocky, rigid frame with ample base nicely finished in battleship gray enamel. The steel spindle ½ inch in diameter, running in "Oilite" bearings 1¼ in. long, is threaded at both ends and has two sets of flanges for wheels up to 4 inches in diameter with ¾ in. face. V Belt pulley can be driven from behind, above or below. Height to center of spindle 6 in. Weight, 5¼ lbs. Flanges nicely polished, nickled and buffed. Pulley highly buffed. Packed one in a box.

Price, No. **120** Grinding Head.....each **$4.50**

No. 130 M-F GRINDING HEAD

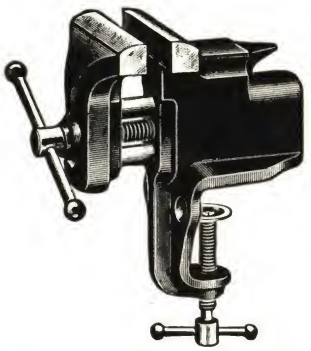


Spindle ½ inch in diameter running in 1¼ inch "Oilite" bearings has a set of flanges for 4 by ¾ inch wheels on either side and an 0 to ⅜ inch capacity three jawed chuck. Flanges and chuck nickeled and buffed. Sturdy, rigid base nicely finished in battleship gray enamel. V Belt pulley can be driven from behind, above or below. Height to center of spindle 6 inches. Weight 5¾ lbs. Packed one in a box.

Price, No. **130** Grinding Head.....each **$5.20**

MILLERS FALLS TOOLS

No. 161 BENCH VISES

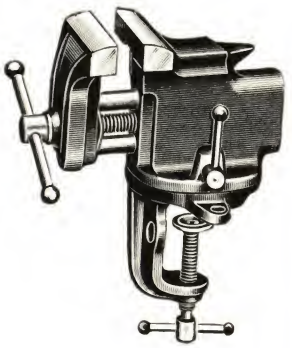


Operated by an accurately cut steel feed screw. Two steel guide rods are provided to insure rigidity.

After the vise is completely assembled, the jaws are milled so that they will meet accurately. They will clamp to any bench less than 1½ inches thick.

Cat. No.	Width Jaws Inches	Jaws Open Inches	Wt. Lbs. Each	Price Each
161	2	2	3⅞	**$2.80**
1700	2½	2¼	4	**3.00**

No. 18 M-F SWIVEL VISE



Twin steel guide rod construction. Swivel base locks at any angle. Machined jaws 2½ inches wide opening 2 inches. Clamps to bench 2 inches thick. Packed one in a box. Weight 5½ lbs.

Price, No. **18** Swivel Vise .....each **$4.20**

No. 500A HACK SAW FRAME DISPLAY UNIT



Unique in design, beautifully finished and requiring very little counter space. Any frame can be removed with extreme ease for close examination of the sturdy construction, fine finish and balance.

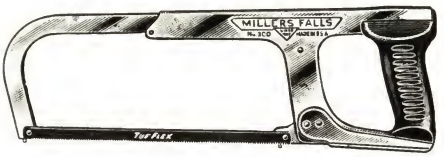
The unit is made up of the display fixture illustrated, which is entirely free and only two each of three of the most popular frames in the whole Millers Falls Line as follows:

2 No. **48**	Hack Saw Frames @	**$3.00**	**$6.00**
2 No. **300**	Hack Saw Frames @	**3.80**	**7.60**
2 No. **1027**	Hack Saw Frames @	**2.20**	**4.40**
1 Display Fixture			Free
No. **500A** Display Unit Complete			**18.00**

Packed one unit in a carton. Weight 24 lbs.

MILLERS FALLS TOOLS

No. 300 M-F HACK SAW FRAME



A fine new, sturdy frame with a new lever tensioning device. Tension relieved by simply pulling down the lever under the handle. The frame is made of $\frac{3}{16}$ x ¾ inch steel. The back is stamped $\frac{1}{16}$ inch hard sheet as is the handle frame. Handle is molded on, unbreakable "Tenite." Blades can be faced in four directions. One 10-inch Tuf-Flex Blade supplied. Packed one in a box. Weight 2¼ lbs.

All exposed metal parts nicely polished and nickel plated.

Price, No. **300** Hack Saw Frame.....each **$3.80**

No. 48 M-F HACK SAW FRAME



A fine, rigid frame with full protected, unbreakable black "Tenite" pistol grip handle. Adjustable for 8 to 12 inch blades, which may be faced in four directions. Made of $\frac{3}{16}$ x $\frac{11}{16}$ inch steel beautifully nickeled and buffed. Depth throat 3¼ inches. Furnished with a 10 inch Millers Falls Blade. Packed one in a box. Weight 2 lbs.

Price, No. **48** Hack Saw Frame.....each **$3.00**

No. 1027 M-F HACK SAW FRAME



A fine quality frame that appeals instantly to the tool-wise purchaser. The heavy back reinforcement extends down the entire length of the molded, tempered rubber pistol grip handle, making it practically unbreakable. The hang is excellent. Adjustable for 8 to 12 inch blades which can be faced in four directions. Equipped with one 10 inch blade. Finely polished, nickel plated and buffed. Packed two in a box. Weight 1¾ lbs.

Price, No. **1027** Hack Saw Frame.....each **$2.20**

No. 1237 M-F HACK SAW FRAME



A substantial and serviceable frame with specially reinforced back and fitted with a durable, tempered rubber pistol grip handle. Easily adjustable for 8 to 12 inch blades which can be faced in four directions. Equipped with one 10-inch blade. Nicely finished in buffed nickel. Capacity 8–12 inches. Depth, 3¼ inches. Stock, $\frac{3}{16}$ x $\frac{11}{16}$ inch. Packed two in a box. Weight 1¾ lbs.

Price, No. **1237** Hack Saw Frame.....each **$1.80**

MILLERS FALLS TOOLS

No. 99 M-F HACK SAW FRAME



A serviceable frame at an attractive price. The handle is made of a tempered rubber, reinforced its entire length, knurled and shaped to give a sure, comfortable grip. Excellent balance. Substantial frame construction, permitting ample tension on the blade by means of a wing nut. Blade can be faced four ways. Equipped with one 10-inch blade. Quickly and positively adjustable for 8 to 12-inch blades. All exposed metal parts nickel plated and buffed.

Packed two in a box. Weight 1⅛ lbs.

Price, No. **99** Hack Saw Frame.....each **$1.20**

No. 237 KEYHOLE HACK SAW



Cuts nails, metal lath, plaster board, stucco, armored cable, conduit, packing, bone, bakelite, fibre, hard and soft wood, etc., etc. Great for use in corners where an ordinary hack saw cannot be used. Handle is nicely finished in red and black enamel; it is light and fits the hand comfortably. An excellent quality blade with a flexible back which minimizes breakage. Blade has 18 teeth per inch. Mounted on an attractive two-color display card.

Length of blade 5½ inches; length overall 9½ inches. Weight 4 ounces. Packed six saws in a box.

Price, No. **237** Keyhole Hack Saw....per doz. **$4.30**
Extra Blades—per dozen, **$2.00.**

No. 725 NEST OF SAWS



A combination of the fast selling No. 525 Rotatable Blade Keyhole Saw with two extra interchangeable blades — one each No. 25 and No. 27, giving greatly increased range of usefulness.

Carpenters, auto mechanics, plumbers, steamfitters, tinsmiths, as well as farmers, home owners and hobbyists need this tool. The compact and comfortable pistol grip handle, the feature which permits the rotating and locking of the blade in any of eight positions, together with the outstanding quality of the blades themselves, make it the outstanding buy.

Additional sales appeal has been added by mounting the combination on an attractive two-color, heavy, ten-ply card for display in windows, on counters or bins. Packed four in a box.

Price, No. **725** Nest of Saws (Carded)....each **$2.95**

MILLERS FALLS TOOLS

M-F ROTATABLE BLADE KEYHOLE SAWS



Every mechanic, craftsman and home owner needs these saws. The blade can be rotated by loosening the thumb nut and locked in any of eight positions for cutting in tough spots.

Available with three types of blades for cutting steel, iron, plaster, wood, bone, metal lathe, etc., etc. Metal cutting blades made of "Tuf-Flex" alloy steel with either 10 teeth or 24 teeth. Blades easily interchangeable. Cutting edge 11¼ inches; overall length 15½ inches. One in a box.

Cat. No.	Type Blade	Wt. Lbs. Per Box	Price Each	Extra Blades
425	24T Metal	1	**$2.00**	**$0.50**
525	10T Metal	1	**2.00**	**.50**
625	7T Wood	1	**2.00**	**.50**

"TUF-FLEX®" HAND HACK SAW BLADES

Tuf-Flex (Patented) Alloy Steel

TUF-FLEX

A remarkable, unbreakable, general purpose saw made of a patented (U. S. No. 2,252,869) alloy steel; super-flexible, super-tough, practically non-stripable teeth.

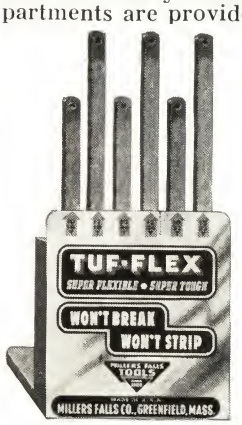
Best all around blade for cutting hard and soft steels.

Packed 100 in a box.

Lg. In.	Width In.	Thickness In.	No. of Blade Teeth Per Inch 14	18	24	32	Wt.Lb. Per 100	Price Per 100
10	½	.025		53FH	63FH	73FH	3⅝	**$13.00**
12	½	.025	45FH	55FH	65FH	75FH	4¼	**16.00**

Blades with 14 and 18 teeth have standard set; 24 and 32 teeth have wavy set.

Tuf-Flex Special Alloy Blades prominently displayed in this compact, eye-catching display fixture can easily double or treble sales. Six compartments are provided, three each for 10 and 12-inch blades in 18, 24, and 32 pitch.



Finished in red, yellow and black, on a chrome plate background this sparkling display requires less than ⅓ square foot of counter space. It is substantially made of wood and chrome plated sheet. Base only 4½x 8 inches.

Display fixture is entirely free with initial orders for the unit. Assortment of blades is as follows:

20—No. 53FH—10"—18T
20—No. 63FH—10"—24T
10—No. 73FH—10"—32T
20—No. 55FH—12"—18T
20—No. 65FH—12"—24T
10—No. 75FH—12"—32T

Shipping weight, 4½ lbs.

No. **550** Tuf-Flex Display Unit.....each **$14.50**

MILLERS FALLS TOOLS

M-F SCREW DRIVER BITS



An unexcelled line, hammer-forged from the best quality of steel procurable for the purpose. Carefully hardened, tempered and nicely polished. Points carefully formed and accurately finished to fit the slots of the size screws for which they are intended. Length, 5 inches over all.

Cat. No.	Size Inches	Size Screws	Std. Pkg.	Wt. Lbs. Per Doz.	Price Per Doz.
351	4/16	6 to 8	12	⅔	$4.80
351	5/16	8 to 12	12	¾	4.80
351	6/16	12 to 16	12	1	6.00
351	7/16	16 to 20	12	1¼	6.00
351	8/16	20 to 24	12	1½	6.00
351	Asst. ¼-⅜	6 to 16	....	¾	5.20

No. 909 M-F SCREW DRIVERS



No finer general purpose screw driver can be made. Hammer-forged blades of tough tool steel, properly heat-treated. Shanks have long, wide wings that prevent turning in the handle. Mahogany lacquered hardwood handles are fluted to give a good grip. Heavy steel ferrules, securely pinned on. Blades highly polished. Head and ferrule nickle plated.

Cat. No.	Size Blade, Inches Length	Diameter	No. in Box	Wt. Lbs. Per Box	Price Per Doz.
909	2	7/32	6	¾	$5.80
909	3	7/32	6	⅞	5.80
909	4	9/32	6	1⅜	6.30
909	5	5/16	6	1⅞	6.50
909	6	5/16	6	2	6.80
909	8	⅜	6	3¼	9.65
909	10	⅜	6	3¾	10.10
909	12	⅜	6	4⅛	12.10
909	18	⅜	6	5½	18.90

No. 7777 M-F SCREW DRIVERS



A strong, durable screw driver made in the five most saleable lengths. Blade of specially tough, hammer-forged steel, hardened and tempered its entire length. Forged lugs on shank prevent turning in handle. Heavy nickel-plated steel ferrule. Hardwood handle with black lacquer finish with red end. Blades nickel plated and burnished. Packed one dozen of a size in a box.

Cat. No.	Length Blade Inches	Wt.Lbs. Box	Price Per Doz.	Cat. No.	Length Blade Inches	Wt.Lbs. Box	Price Per Doz.
7777	3	2	$2.60	7777	6	4	$3.45
7777	4	2½	2.90	7777	8	6½	4.85
7777	5	3¾	3.45	.....	..	.....	.....

No. 355 M-F CABINET SCREW DRIVERS



Made from best materials and finely finished. Blades hammer-forged from high grade tool steel. Mahogany lacquered hardwood handles. Diameter of blade, 7/32 inch. Packed six in a box.

Cat. No.	Length Blade	Wt.Lbs. Box	Price Per Doz.	Cat. No.	Length Blade	Wt.Lbs. Box	Price Per Doz.
355	2½	⅞	$5.45	355	5½	1	$6.30
355	3½	⅞	5.70	355	6½	1⅛	6.70
355	4½	1	5.90	355	8½	1¼	8.40

MILLERS FALLS TOOLS

No. 55 M-F RATCHET SCREW DRIVER



Three actions — right and left ratchet and rigid. Equipped with a smooth, trouble free ratchet mechanism and a knurled collar for rotating the blade with the fingers. Cabinet type blades nicely polished. Other exposed metal parts nickeled. Mahogany finished hardwood handles. Packed six in a box.

Cat. No.	Length Blade Inches	Wt. Lbs. Box	Price Each	Cat. No.	Length Blade Inches	Wt. Lbs. Box	Price Each
55	2	1	$1.40	55	4	1¼	$1.50
55	3	1	1.50	55	6	1¼	1.60

No. 63 M-F RATCHET SCREW DRIVER



Time tested ratchet mechanism controlled by knurled shifter sleeve gives right or left ratchet or rigid action. Blade forged from best quality steel nicely polished, other exposed metal parts nickeled. Mahogany finished hardwood handle. Packed six in a box.

Cat. No.	Length Blade Inches	Wt.Lbs. Per Box	Price Each	Cat. No.	Length Blade Inches	Wt.Lbs. Per Box	Price Each
63	3	1⅞	$1.60	63	6	3⅜	$1.80
63	4	2	1.70	63	8	3⅝	2.00

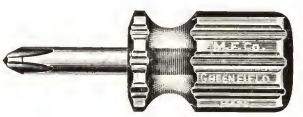
No. 850 M-F PHILLIPS SCREW DRIVERS



These licensed screw drivers are designed to handle Phillips Recessed Head Screws. Blades machined within very close limits to fit the screws perfectly. Blades nicely polished and tempered entire length. Indestructible, shock-proof transparent red Permaloid handles.

Cat. No.	Phillips Sizes	Blade, Inches Length	Diameter	Per Box	Price Each
850—1	0 to 4	3	9/64	6	$0.90
850—2	5 to 9	4	¼	6	1.05
850—3	10 to 16	6	5/16	6	1.30
850—4	18 to 24	8	⅜	6	1.70

No. 860 PHILLIPS SCREW DRIVERS



A short, sturdy screw driver for driving or drawing Phillips screws in cramped quarters where a regular length driver could not be operated. Fitted with indestructible, shock-proof, transparent red Permaloid handles.

Cat. No.	Phillips Sizes	Length Blade Inches	Per Box	Price Each
860—1	0 to 4	1½	6	$0.80
860—2	5 to 9	1½	6	.90
860—3	10 to 16	1½	6	1.00

MILLERS FALLS TOOLS

No. 854 M-F PERMALOID SCREW DRIVERS



A sturdy driver for use in close quarters. Forged from square chrome nickel steel, carefully tempered. Bit cross ground. Indestructible, shockproof, transparent red Permaloid handle.

Cat. No.	Length Blade Inches	Shank Inches	Per Box	Price Per Doz.
854	1½	$\frac{5}{16}$ x $\frac{5}{16}$	6	**$7.20**

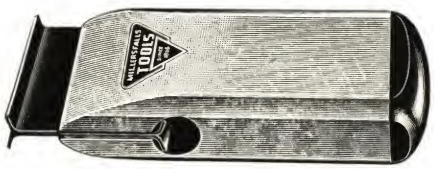
No. 851 M-F PERMALOID SCREW DRIVERS



Chrome vanadium steel blades, tempered their entire length. Cross ground bits. Round shanks finely polished. Indestructible, shockproof, transparent red Permaloid handles. Packed six in a box.

Cat. No.	Size Inches Blade Length	Size Inches Diam. Shank	Price Per Doz.	Cat. No.	Size Inches Blade Length	Size Inches Diam. Shank	Price Per Doz.
851	4	$\frac{9}{32}$	**$9.00**	**851**	10	⅜	**$18.00**
851	6	$\frac{5}{16}$	**12.60**	**851**	12	⅜	**19.60**
851	8	⅜	**16.80**	.....	....	....	.....

Nos. 34 and 35 M-F WOOD SCRAPERS



The most useful tool ever devised for putting a fine finish on woodwork and for removing paint, etc., from furniture, walls, etc., with surprising ease. Four-edged carbon steel blade carefully tempered to hold a keen edge. It is held firmly in comfortably shaped hardwood handle with two edges exposed and the other two edges instantly available by reversing blade.

Cat. No.	Size Blade, Inches Width	Size Blade, Inches Length	Per Box	Wt. Oz. Each	Price Each
34	2½	5	6	5	**$0.80**
35	1½	5	6	2¾	**.60**

Extra Blades—For No. **34**, **$0.40**; No. **35**, **$0.25.**

M-F WOOD SCRAPERS



The new paint brush type handle with which this tool is equipped is a happy combination that provides ample room for applying pressure with the left hand and at the same time a sure, comfortable grip for the right in exerting the necessary pull. The carefully tempered tool steel blade has four scraping edges. Two are always ready for use, and the other two sharp ones quickly available by simply reversing the blade in the handle. The selected hardwood handle is nicely finished with clear lacquer.

Cat. No.	Size Blade, Inches Width	Size Blade, Inches Length	Per Box	Wt. Oz. Each	Price Each
39	2½	8¾	6	1	**$0.80**
51	1½	7½	6	4	**.60**

Extra Blades—for No. **39**, **$0.40**; No. **51**, **$0.25.**

MILLERS FALLS TOOLS

No. 106 M-F CARVING TOOL SET



A set of six tools selected to give a wide range of operation and effects in wood and linoleum. The blades are forged from high quality steel, carefully heat-treated, nicely polished and edged. The handles, protected with nickeled ferrules, are hardwood.

Tools consist of: 1, $\frac{1}{16}$" Straight Chisel (A); 1, ⅜" Bent Gouge (D); 1, ¾" Bent Chisel (B); 1, $\frac{3}{32}$" U Tool (E); 1, ¼" Skew Bevel Chisel (C); and 1, $\frac{3}{32}$" Veining Tool (F).

Length of tool, 6¼ inches.

Price, No. **106** Carving Tool Set.....per set **$4.60**

No. 107 M-F CARVING TOOL SET



Designed primarily for Boy Scouts and other individuals who get fun and pleasure from wood and linoleum block carving. Consists of six tools, as follows:

1—⅜ in. Bent Chisel (B)
1—$\frac{3}{32}$ in. U Tool (E)
1—¼ in. Skew Bevel Chisel (C)
1—$\frac{3}{32}$ in. Veining Tool (F)
1—⅜ in. Bent Gouge (D)
1—Carborundum Stone

Forged, carefully heat-treated blades are well edged and nicely polished. Lacquered maple handles of special shape that fit snugly into palm of hand. Flatted on one side so they are in the proper working position when picked up off the bench. Length of tools, 5 inches.

Packed one in a slide covered wood box.

Price, No. **107** Carving Tool Set.... per set **$4.20**

No. 294 DISPLAY UNIT



The attractive display for the No. 29 screw driver and its attachments made of wood, lacquered and silk screened in three colors, is free with only four screw drivers.

Complete with 4 No. 29 Screw Drivers and 1 each Nos. 329 Set of Points, 297 Screw Driver Bit, 298 Countersink and Display.

Weight 3¾ lbs.

Price, No. **294** Display Unit.....each **$13.10**

MILLERS FALLS TOOLS

"BLU-FLEX®" HAND HACK SAW BLADES



This is the famous Millers Falls Blu-Mol blade with a tough, flexible back — unbreakable in use. The hard, high speed cutting teeth are wear resistant having received the identical processing of the Blu-Mol blade.

This remarkable new high speed blade is a cost cutter wherever a high percentage of cutting is on the harder alloy steels. Its extreme flexibility eliminates the high cost of breakage and insures every cent's worth of its cutting value being delivered in useful work.

Blu-Flex is outstanding where cutting is toughest.

Lg. In.	Width In.	Thickness In.	No. of Blade Teeth Per Inch 14	18	24	32	Wt. Lb. Per 100	Price Per 100
10	½	.025		1018BF	1024BF	1032BF	3⅝	**$51.00**
12	½	.025	1214BF	1218BF	1224BF	1232BF	4¼	**61.00**
12	⅝	.032	1254BF	1258BF	Packed 10 in a box			**75.00**

14 and 18 tooth blades have standard set; 24 and 32 tooth blades have wavy set.

BLU-FLEX DISPLAY UNIT

Blu-Flex High Speed Hand Blades prominently displayed in this compact, eye-catching display fixture can easily double or treble sales. Six compartments are provided, three each of 10 and 12-inch blades in 18, 24 and 32 pitch.



Finished in gold, blue and red this colorful display requires less than ⅓ square foot of counter or window space. It is substantially made of wood and pressed wood. Base only 4½x8 inches.

Display fixture is entirely free with initial orders for the unit. Assortment of blades is as follows:

10—No. 1218BF—12"—18T
10—No. 1224BF—12"—24T
5—No. 1232BF—12"—32T
10—No. 1018BF—10"—18T
10—No. 1024BF—10"—24T
5—No. 1032BF—10"—32T

Shipping weight, 3½ lbs.

Price, No. **2222** Blu-Flex Display Unit .....each **$28.00**

BE SURE TO ACQUAINT YOURSELF WITH OTHER PRODUCTS WE HANDLE THAT ARE NOT INCLUDED IN THIS CATALOG

MILLERS FALLS TOOLS

No. 106 M-F FLEXIBLE STEEL RULE

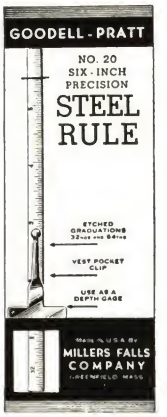


A high-grade, precision 6-inch flexible steel rule in every sense of the word. Made of carefully heat-treated crucible steel with ground edges and precisely and clearly etched graduations in 16ths and 32nds of an inch.

Each rule is mounted on an attractive gold card printed in red and black and packed in a moisture-proof cellophane envelope. Packed six in a box.

Cat. No.	Length Inches	Width Inch	Thickness	Price Each
106	6	⅝	1/100	**$0.60**

No. 20 M-F 6-INCH RULE



A 6-inch narrow precision steel rule with a fine finish and genuine etched figures and graduations. Graduated in 32nds of an inch on one side and 64ths on the other. Fitted with a sliding vest pocket clip, which also serves as a depth gauge.

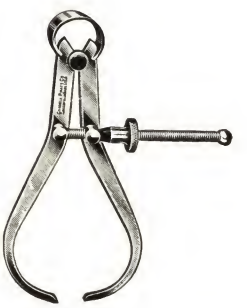
Length 6 in., width ¼ in., thickness 1/20 inch.

Each rule mounted on a two-color card in a cellophane envelope. Packed 6 in a box. Weight 4 oz.

Price, No. **20** Steel Rule .....each **$0.50**

M-F OUTSIDE SPRING CALIPERS

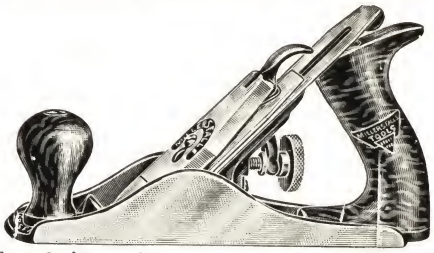
Designed for the utmost precision in taking or transferring measurements. Legs tapered, shaped and pointed for sensitive adjustments. Powerful tempered springs. Accurately machined and hardened spool eliminates side deflection. Quick nuts run freely on precise, hardened screws. Finely polished finish.



Cat. No.	Size Inches	Old No.	Price Each	Cat. No.	Size Inches	Old No.	Price Each
620	3	601	**$1.90**	**620**	8	605	**$2.40**
620	4	602	**2.00**	**620**	10	650	**3.10**
620	5	603	**2.10**	**620**	12	651	**3.35**
620	6	604	**2.20**	------	----	------	--------

MILLERS FALLS TOOLS

MILLERS FALLS SMOOTH PLANES

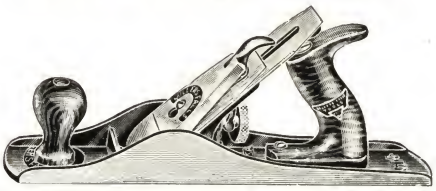


End and side adjustment of cutters. Cutters solid high carbon steel. Bottoms and sides milled and polished. Inside of bottoms enameled black — frogs enameled red. Tropical hardwood knobs and handles. Lever cap with three point bearing nickeled and buffed. Entire tool beautifully finished.

Smooth Bottoms

Cat. No.	Length Inches	Cutter Inches	Std. Pkg.	Wt. Lbs. Each	Price Each
8	8	1¾	1	3¼	**$7.30**
9	9	2	1	3⅞	**7.60**
10	10	2⅜	1	5	**9.00**
		Corrugated Bottoms			
8C	8	1¾	1	3¼	**7.50**
9C	9	2	1	4	**7.80**
10C	10	2⅜	1	5	**9.30**

MILLERS FALLS JACK PLANE

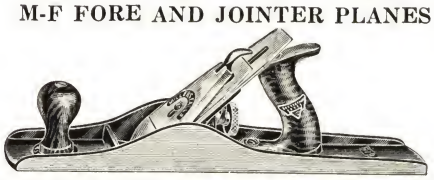


End and side adjustment of cutters. Cutters solid high carbon steel. Fine gray iron bottoms and frogs. Tropical hardwood knobs and handles. Nickel-plated lever cap with three point bearing. Entire tool beautifully finished.

Smooth Bottoms

Cat. No.	Length Inches	Cutter Inches	Std. Pkg.	Wt. Lbs. Each	Price Each
11	11½	1¾	1	3⅞	**$7.90**
14	14	2	1	5⅛	**8.30**
15	15	2¼	1	6¼	**11.00**
		Corrugated Bottoms			
14C	14	2	1	5¼	**8.50**
15C	15	2¼	1	6⅛	**11.30**

M-F FORE AND JOINTER PLANES



End and side adjustment of cutters. Cutters solid high carbon steel. Bottoms and sides milled and polished. Inside of bottoms enameled black — frogs enameled red. Tropical hardwood knobs and handles. Lever cap with three point bearing nickeled and buffed. Entire tool beautifully finished.

Smooth Bottoms

Cat. No.	Length Inches	Cutter Inches	Std. Pkg.	Wt. Lbs. Each	Price Each
18 Fore	18	2⅜	1	7⅝	**$12.50**
22 Jointer	22	2⅜	1	8⅜	**15.00**
24 Jointer	24	2⅝	1	10½	**17.00**
		Corrugated Bottoms			
18C Fore	18	2⅜	1	7¼	**12.80**
22C Jointer	22	2⅜	1	8¼	**15.30**
24C Jointer	24	2⅝	1	10⅛	**17.30**

MILLERS FALLS TOOLS

M-F ADJUSTABLE BLOCK PLANES

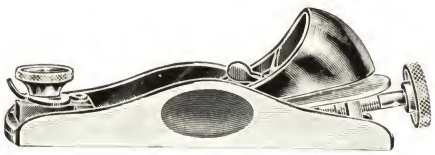


Adjustable throat. End and side adjustment of cutters. Solid high carbon steel cutters. Cast caps with lever cam lock.

Black Enamel Trimming

Cat. No.	Length Inches	Cutter Inches	Std. Pkg.	Wt. Lbs. Each	Price Each
16	6	1⅝	1	1½	**$4.20**
17	7	1⅝	1	1⅝	**4.00**

M-F BLOCK PLANES



Low angle with adjustable throat. Screw end adjustment of cutter. Cutters made of one solid piece of fine high carbon steel set at 12 degrees for smooth cuts across the grain of hard woods.

Nickel Trimming

Cat. No.	Length Inches	Cutter Inches	Std. Pkg.	Wt. Lbs. Each	Price Each
56	6	1⅝	1	1¼	**$4.20**
57	7	1⅝	1	1½	**4.40**

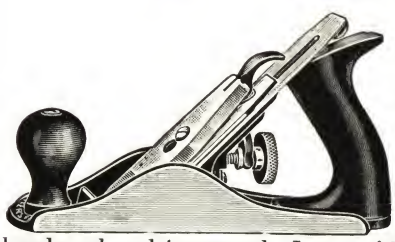
M-F BLOCK PLANE



Polished sides. Black enameled cast cap with lever cam lock. Screw end adjustment of cutter. Cutter one solid piece of fine quality high carbon steel. Tropical hardwood knob handle.

Cat. No.	Length Inches	Cutter Inches	Std. Pkg.	Wt. Lbs. Each	Price Each
45	5½	1⅜	1	1⅛	**$2.80**
75	7	1⅝	1	1½	**2.70**

No. 900 M-F SMOOTH PLANE

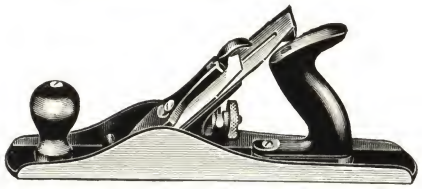


Bottom and frog fine gray iron castings. Bottom and sides milled and polished. Inside black enameled. Plane iron of good quality steel, carefully hardened and tempered. Lever side adjustment of cutter. Screw end adjustment of cutter. Clamp lever handle red. Hardwood handle and knob with black lacquer finish.

Cat. No.	Length Inches	Cutter Inches	Std. Pkg.	Wt. Lbs. Each	Price Each
900	9	2	1	3¾	**$3.90**

MILLERS FALLS TOOLS

No. 814 M-F JACK PLANE



Bottom and frog of fine gray iron castings. Bottom and sides milled and polished. Inside black enameled. Plane iron of good quality steel, carefully hardened and tempered. Lever side adjustment and screw depth adjustment of cutter. Hardwood handle and knob with black lacquer finish. Clamp lever handle finished in red. Packed one in a box.

Cat. No.	Length Inches	Cutter Inches	Wt. Lbs. Each	Price Each
814	14	2	4¾	**$4.60**

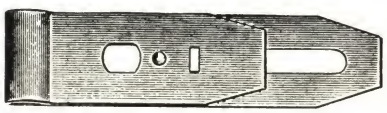
M-F RABBET AND FILLISTER PLANE



Two cutter seats — one for regular work with a lever adjustment of the cutter and one for forward bull nose work. Adjustable fence can be used on either side or removed entirely. Three point spur and depth gauge. Finished in nickel and black enamel. Packed one in a box.

Cat. No.	Length Inches	Cutter Inches	Wt. Lbs. Each	Price Each
85	8½	1½	3¼	**$6.00**

BENCH PLANE IRONS



Double Iron

The heart of any plane is the cutter iron. Without a fine iron a plane cannot produce the smooth, easy cuts that are expected of an efficient, high quality tool.

These irons are made of one solid piece of selected tool steel heat-treated with the utmost care to the point where they will give excellent results in hardwood and still are not too hard to be honed back into condition readily when dulled. Can be sharpened over and over again.

The irons listed below used in Millers Falls Bench Planes can also be used in planes of several other makes.

Fitting Plane Number	Width Inches	Double Irons Cat. No.	Double Irons Price Each	Single Irons Cat. No.	Single Irons Price Each
8-8C-11	1¾	**1168**	**$1.50**	**168**	**$1.10**
9-9C-14-14C, 814-900	2	**2200**	**1.50**	**200**	**1.10**
15-15C	2¼	**2228**	**1.60**	**228**	**1.20**
10-10C-18-18C, 22-22C	2⅜	**2238**	**1.80**	**238**	**1.30**
24-24C	2⅝	**2258**	**1.80**	**258**	**1.30**

MILLERS FALLS BIT EXTENSIONS

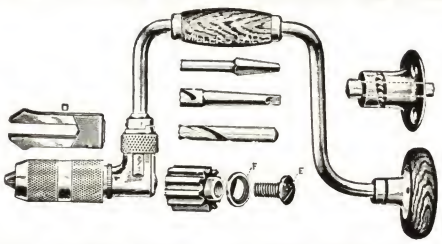
No. 35 M-F BIT EXTENSION



Designed to follow an $\frac{11}{16}$-inch bit or larger but not recommended for continuous bits larger than 12/16 inch. Strong one-piece socket and shank construction. Drop-forged steel jaws hold bits securely. Chuck operated by turning knurled collar. Hexagon portion for tightening with wrench if needed. Packed one in a box.

Cat. No.	Length Inches	Weight Ounces	Price Each
35	18	13	**$3.30**
35	21	14	**3.50**
35	24	16	**3.70**

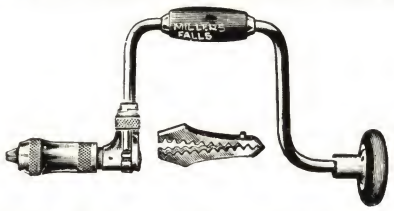
Nos. 730-733 M-F RATCHET BRACES



A fine quality brace, equipped with the universal type chuck holding square, No. 1 Morse Taper and plain round shanks ⅛ to ½ inch in diameter. Boxed ratchet mechanism with ring shift. Steel clad, ball bearing head. Handle has inserted metal rings. Head and handle of tropical hardwood. Packed two in a box.

Cat. No.	Sweep Inches	Wt.Lbs. Each	Price Each	Cat. No.	Sweep Inches	Wt.Lbs. Each	Price Each
730	14	3½	**$9.30**	**732**	10	3⅛	**$8.25**
731	12	3¼	**8.60**	**733**	8	2¾	**8.25**

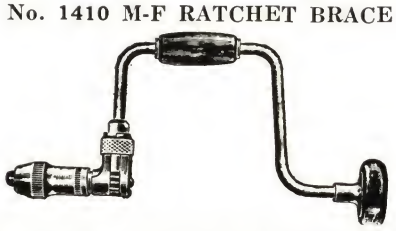
Nos. 1321-1323 M-F RATCHET BRACES



A popular style brace for square shank bits with ebonized hardwood heads and handles. Boxed ratchet with ring shift. Barber chuck with self-opening, forged steel alligator jaws. Ball bearing steel clad head. Handle has inserted metal rings. Packed two in a box.

Cat. No.	Sweep Inches	Wt.Lbs. Each	Price Each	Cat. No.	Sweep Inches	Wt.Lbs. Each	Price Each
1321	12	3	**$7.25**	**1323**	8	2½	**$7.00**
1322	10	2¾	**7.00**	**1324**	6	2¼	**7.00**

No. 1410 M-F RATCHET BRACE



A substantially made ratchet brace with 10 inch sweep selling at a popular price. Equipped with alligator jaws, semi-boxed ratchet and mahogany strained hardwood handles.

Cat. No.	Sweep Inches	Std. Pkg.	Wt. Lbs. Each	Price Each
1410	10	6	2¼	**$2.75**

MILLERS FALLS TOOLS

No. 629 M-F LINE LEVEL



A featherweight level with hooks that snap on a level line easily but so guarded that it cannot be jumped off. The cat's-eye vial is solidly set in the hexagonal aluminum body. Each level in a transparent pocket container.

Length 3 inches. Weight ½ oz. Packed six in a box.

Price, No. **629** Line Level.....each **$0.70**

M-F COMBINATION SQUARES



Fitted with a 1-inch steel blade with clearly etched figures and graduations. Graduated 8ths and 16ths one side and 16ths and 32nds on the other. Black enameled beam has accurately machined faces and is equipped with level and scriber.

Cat. No.	Length Blade Inches	Std. Pkg.	Wt. Oz. Each	Price Each
9500	9	1	13	**$1.90**
1200	12	1	15	**2.00**

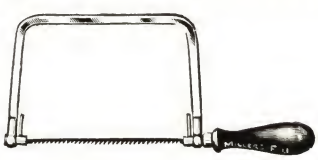
No. 1000 M-F COMBINATION SQUARE



Accurate, well finished square, made especially for carpenters. Used as try square, mitre square, depth gauge, or marking gauge. Blade 12x1 inches, graduated accurately in 8ths, 16th, and 32nds by etching. Working faces of beam accurately milled with polished edges. Web finished in black enamel. Blade moved by loosening knurled binder nut and may be removed entirely.

Cat. No.	Length Blade Inches	Std. Pkg.	Wt. Oz. Each	Price Each
1000	12	1	14	**$1.60**

Nos. 43 and 47 M-F COPING SAW



A rigid durable frame made of stiff, flat spring steel. Blade controlled by turning position of studs without removing. Blades strained by turning the mahogany finished hardwood handle. Holds either loop or pin end blades. All exposed metal parts well nickeled.

Cat. No.	Throat Inches	Std. Pkg.	Wt. Oz. Each	Price Each
43	4¾	6	6	**$1.20**
47	6½	4	9	**1.40**

MILLERS FALLS TOOLS

Nos. 60 and 65 COPING SAW BLADES



Pin pattern blades are heavier, cut faster and will outwear finer tooth blades.

Cat. No.	Size Inches	Wt. Oz. Gross	Price per Gross
60	6 x $\frac{3}{32}$	9	**$4.20**
65	6½ x $\frac{3}{32}$	11	**4.20**

No. 50 M-F COPING SAW BLADES



Blades of the loop or turned end pattern made of fine quality steel with keen, carefully tempered teeth. Cut fast and clean.

Cat. No.	Description	Wt. Oz. Gross	Price per Gross
50	Wired	6	**$3.30**
50	In Envelopes	6	**3.40**

M-F SPIRAL RATCHET SCREW DRIVERS



Smooth, powerful action and tested dependability make this an exceptional value. Five actions — automatically drives or draws screws, acts as a left or right hand ratchet or as a rigid screw driver. Knurled control sleeve and spiral lock nut control action. Spiral is precisely machined, running in two double length bronze spiral nuts, greatly increasing the life of the tool. Three sizes of blades furnished which can be quickly installed in chuck. All exposed metal parts nickel plated. Mahogany finished hardwood handle.

Cat. No.	Length Extended with Bit Inserted	Length Closed	Std. Pkg.	Wt. Lbs. Each	Price Each
67A	12⅝ inches	9⅜ in.	1	9½ oz.	**$5.40**
61A	19½ inches	14⅛ in.	1	1¼	**6.20**
62A	24⅞ inches	16⅞ in.	1	2	**7.80**

Extra Bits—per doz., **$4.00.**

M-F SPIRAL RATCHET SCREW DRIVERS



With Automatic Return

Same as above except has a spring in the handle which automatically returns the handle for the next stroke, making one hand operation easy.

Cat. No.	Length Extended with Bit Inserted	Length Closed	Std. Pkg.	Wt. Lbs. Each	Price Each
670A	13⅛ inches	8⅛ in.	1	¾	**$5.95**
610A	20½ inches	15 in.	1	1½	**6.70**
620A	26¾ inches	18⅞ in.	1	2⅜	**8.50**

Extra Bits—per doz., **$4.00.**

No. 29 SPIRAL RATCHET SCREW DRIVER



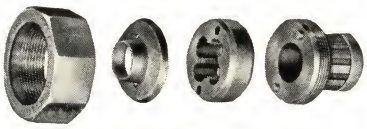
With Automatic Return

A well built, popularly priced automatic screw driver. It drives or drawns small and medium size screws smoothly and rapidly. Carefully machined spiral and dependable ratchet and shift mechanism. Mahogany finished hardwood handle. One polished forged steel blade. Length over all with blade — 10 inches. Packed one in a box.

Price, No. **29** Ratchet Screw Driver.....each **$3.00**

NYE TRIAD STOCKS

One Piece Dies—Assure operator perfect alignment and size. Are locked in place by threaded screw cap, easily removed with a few right hand turns.



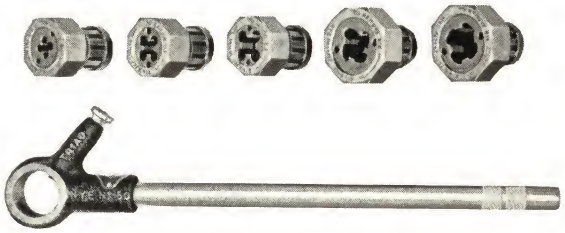
Nye Triad Die Head Parts

Same dies are used on all Triad Stocks but dieheads are different for each of No. 50, No. 55, and No. 60 ratchet stocks.

NYE NO. 50 TRIAD RATCHET STOCK

Capacity ⅛ to ¾ Inch

With Reversible Die Feature



(Fits Fed. Spec. GGG-T-581—Fig. 4—Type D)

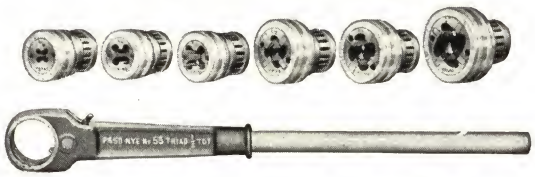
Cat. No.	Item Complete with R.H. Dies	Shpg. Wt. Lbs.	Price Each
N50-5	Stock .....⅛, ¼, ⅜, ½, ¾"	9½	$19.75
N50-4	Stock ..... ¼, ⅜, ½, ¾"	8¼	16.35
N50-3	Stock ..... ⅜, ½, ¾"	7¼	12.95
N50-2	Stock ..... ½, ¾"	6	9.55
N50-R	Ratchet with handle*	2¾	2.75
N50-H	Die Head with die* (specify size)	1¼	3.40
N50-P	Pawl only with spring	¼	1.05

*Interchangeable with Toledo No. 00, Armstrong No. 90R, and Beaver No. 2 die heads and stocks.

NYE No. 55 TRIAD RATCHET STOCK

Capacity ⅛ to 1 Inch

With Reversible Die Feature

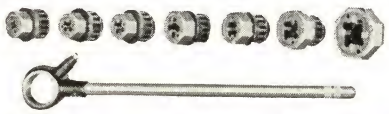


Cat. No.	Item Complete with R.H. Dies	Shpg. Wt. Lbs.	Price Each
N55-61	Stock .....⅛, ¼, ⅜, ½, ¾, 1"	12½	$28.50
N55-51	Stock ..... ¼, ⅜, ½, ¾, 1"	11¼	24.50
N55-41	Stock ..... ⅜, ½, ¾, 1"	10¼	20.50
N55-31	Stock ..... ½, ¾, 1"	9	16.50
N55-21	Stock ..... ¾, 1"	7¼	12.50
N55-5	Stock .....⅛, ¼, ⅜, ½, ¾"	10½	24.15
N55-4	Stock ..... ¼, ⅜, ½, ¾"	9¼	20.15
N55-3	Stock ..... ⅜, ½, ¾"	8	16.15
N55-2	Stock ..... ½, ¾"	6¾	12.15
N55-R	Ratchet only with handle....	2¾	4.15
N55-H	Die Head with die (sizes except 1").....	1¼	4.00
N55-H1	Die Head with die—1" size	1¾	4.35
N55-P	Pawl only with spring and pin	¼	1.05

NYE NO. 60 TRIAD RATCHET STOCK

Capacity ⅛ to 1¼ Inches

With Reversible Die Feature



(Fits Fed. Spec. GGG-T-581—Fig. 4—Type D)

Cat. No.	Item Complete with R.H. Dies	Shpg. Wt. Lbs.	Price Each
N60-7	Stock ⅛, ¼, ⅜, ½, ¾, 1, 1¼"	21½	$30.80
N60-6	Stock ¼, ⅜, ½, ¾, 1, 1¼"	19¾	27.05
N60-5	Stock ⅜, ½, ¼, 1, 1¼"	17¾	23.30
N60-4	Stock ½, ¾, 1, 1¼"	15¾	19.55
N60-41	Stock ⅜, ½, ¾, 1"	14¼	19.25
N60-31	Stock ½, ¾, 1"	12½	15.50
N60-R	Ratchet with handle†	4¼	3.95
N60-H	Die head with die†— sizes ⅛ to ¾†	2	3.75
N60-H1	Die head with die†— sizes 1 and 1¼"	2½	4.05
N60-P	Pawl only wth spring	¼	1.05

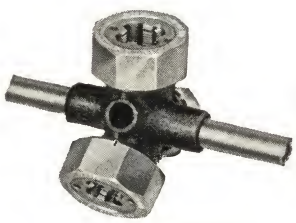
†Interchangeable with Toledo No. 11 die heads and stocks.

NYE THREE WAY TRIAD STOCKS

⅜ to ¾-Inch and ½ to 1-Inch

With Reversible Die Feature

(Fits Fed. Spec. GGG-T-581—Fig. 5—Type E)



Patented

Dies and caps are identical with those of Ratchet sets. Heads are similar except they are parts of a single malleable casting.

Cat. No.	Item Complete with R.H. Dies	Shpg. Wt. Lbs.	Price Each
N3W-30	⅜, ½, ¾"	7½	$10.60
N3W-31	½, ¾, 1"	11¼	12.35

TRIAD DIES AND PARTS

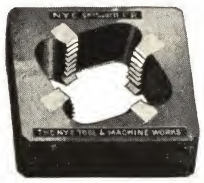
Cat. No.	Item		Shpg. Wt. Lbs.	Price Each
ND-T	Triad Dies only—⅛, ¼, ⅜"..	Pipe	¼	$2.45
ND-T	Triad Dies only—½, ¾"	or	½	2.85
ND-T	Triad Dies only—1, 1¼".....	conduit	½	3.00

NYE TOOLS

SOLID SKIP-TOOTH OR FULL-THROAT DIES

With Threaded Throat

(Fits Fed. Spec. GGG-T-581—Fig. 2—Type B)



The Nye feature of removing every alternate tooth in back of die to reduce friction, together with the threaded throat feature assures easy starting, and easy cutting. Made of finest steel, hardened and tempered in oil.

Will fit all makes of Solid Stocks corresponding to the catalog numbers with their die capacities listed below. (Prices shown are for right hand dies; left hand dies are 100% higher.)

Cat. No.	Dimensions of Dies	Sizes	Shpg. Wt. Lbs.	Price Each
ND-1	2½x2½x ¾	⅛,¼,⅜,½,¾,1	2	$3.00
ND-2	4 x4 x ⅞	½,¾,1,1¼,1½,2	2½	5.00

NO. 1 SOLID SKIP-TOOTH CONDUIT DIES

Can be used in any stock accommodating No. 1, 2½x2½x¾-inch dies.

ND-1C	½, ¾, 1".....	1	$3.00

No. 1 SOLID BOLT DIES



Can be used in any stock accommodating No. 1, 2½x 2½x¾ Dies.

National Coarse Thread (U.S.S.)

Cat. No.	Shpg. Wt. Lbs.	Price Each
ND-1B	1	$2.90

Sizes	¼"	5/16"	⅜"	7/16"	½"	9/16"	⅝"	¾"	⅞"	1"	1⅛"
Threads Per Inch	20	18	16	14	13	12	11	10	9	8	7

No. 1 IMPROVED SOLID MALLEABLE STOCK

With Pipe or Bolt Dies



Complete with Genuine Skip-Tooth Dies

Cat. No.	Item Complete with R.H. Skip-Tooth Dies	Shpg. Wt. Lbs.	Price Each
N1-16	Stock ⅛, ¼, ⅜, ½, ¾, 1"....	12¼	$20.80
N1-15	Stock ¼, ⅜, ½, ¾, 1"....	11¼	18.05
N1-14	Stock ⅜, ½, ¾, 1"....	10¼	15.25
N1-13	Stock ⅜, ½, ¾".....	9¾	12.50
N1-131	Stock ½, ¾, 1"....	9¾	12.50
N1-12	Stock ½, ¾".....	8¼	11.90
N1-10	Stock with handles less dies	7	8.00
ND-1	Extra Solid Skip-Tooth Dies	1	3.00

Item Complete with No. 1 Solid Bolt Dies (NC)

N1-B8	Stock and 8 Dies as selected	15	$25.50
N1-B7	Stock and 7 Dies as selected	14	23.20
N1-B6	Stock and 6 Dies as selected	13	20.85
N1-B5	Stock and 5 Dies as selected	12	18.50
ND-B	Extra Solid Bolt Dies.....	1	2.90

NYE TOOLS

NYE TRIPLEX SOLID DIE STOCK



(Fits Fed. Spec. GGG-T-581–Fig. 5–Type E)

Lightweight one-piece combination stock holds three dies and has permanently fixed steel guides. There are generous openings in body, clearly shown in the cut, that amply allow for oiling and chip clearance.

Supplied in two combinations: ⅜ to ¾ inch, and ½ to 1 inch.

Cat. No.	Item Complete with R.H. Skip-Tooth Dies	Shpg. Wt. Lbs.	Price Each
NT-30	Stock ⅜, ½, ¾".....	11¼	$13.75
NT-31	Stock ½, ¾, 1".....	11¼	13.75
NT-0	Stock less dies and bushings	8¼	6.60
ND-1	Extra Solid Skip-Tooth Dies	1	3.00

NO. 1 MALLEABLE STOCK

With Loose Bushings or Guides



Cat. No.	Item Complete with R.H. Skip-Tooth Dies	Shpg. Wt. Lbs.	Price Each
N1-6	Stock ⅛, ¼, ⅜, ½, ¾, 1".....	13½	$20.80
N1-5	Stock ¼, ⅜, ½, ¾, 1".....	12¼	18.05
N1-4	Stock ⅜, ½, ¾, 1".....	11¼	15.25
N1-3	Stock ½, ¾, 1".....	10	12.50
N1-2	Stock ½, ¾.....	9¼	11.90
N1-0	Stock with handles and screws	7¼	5.50
ND-1	Extra Solid Skip-Tooth Dies..	1	3.30
N1-G	Extra Guides (not needed for 1")	¼	.50

NYE PIPE THREADING OIL

Nye Pipe Threading Oil is an essential coolant, a good penetrant, has sufficient body to form an efficient cushion for the die. These qualities facilitate clean, sharp and accurate threads, and longer life for the dies.

Furnished in regular dark, or clear-cut. Both have approximately the same body.



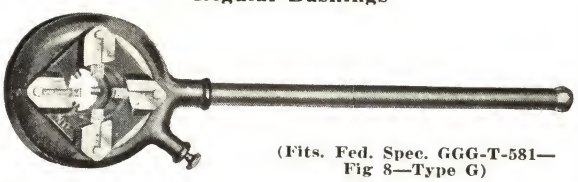
Cat. No.	Quantity	Shpg. Wt. Lbs.	Dark	Clear
NO-1	1 Gallon Cans	10	$1.27	$1.27
NO-5	5 Gallon Cans	45	1.08	1.08
NO-55	55 Gal. Drums	470	.94	.94

Federal Tax Extra

NYE TOOLS

NYE NO. 1R RATCHET STOCK

Regular Bushings

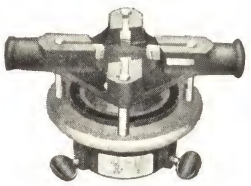


(Fits. Fed. Spec. GGG-T-581—Fig 8—Type G)

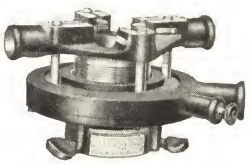
Cat. No.		Shpg. Wt. Lbs.	Price Each
N1R-4	Receding Stock (Ratchet) complete with bushings and dies 1, 1¼, 1½ and 2"	23	$22.00
N1R-O	Stock less dies and handles..	16½	14.85

No. 1 AND No. 1A RECEDING STOCK

With Regular Bushings and Set Screws



No. 1



No. 1A
(Fits Fed. Spec. GGG-T-581—Fig. 8—Type G)

Cat. No.	Item Complete With Bushings and R. H. Dies	Shpg. Wt. Lbs.	Price Each
N1-Re4	Stock—1, 1¼, 1½, and 2"..	21	$21.75
N1-ReO	Stock—less dies and handles	14¾	12.00
N1A-4	Stock—1, 1¼, 1½, and 2"..	25¾	23.50
N1A-O	Stock—less dies and handles	18¾	15.70
N1A-G	Guides (Bushings) 1, 1¼, 1½, and 2".....	¾	.55
N1A-S	Thumb Screws	⅛	.25
N1A-P	Nail, Spring, and Pin.....	¼	.30

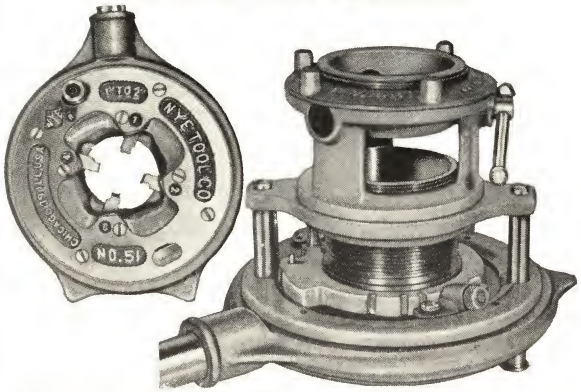
REPAIR PARTS FOR NYE 1, 1A, and 1R RECEDING DIE STOCKS

When ordering repairs always specify the serial number which appears on the name plate of the tool. Prices shown are for standard parts only. Other tool parts quoted upon request.

Part No.	Description	Price Each
	Interchangeable for Stock Nos. 1, 1A, 1R	
1A-1	Handles, per pair (For Nos. 1 and 1A only).....	$2.25
1A-2	1- inch Guide	.65
1A-3	1¼-inch Guide	.65
1A-4	1½-inch Guide	.65
1A-5	Pipe Holder	3.05
1A-6	Thumb Screw, each	.25
1A-7	Taper Pin, each.....	.45
1A-8	Die Retaining Spring ..... { one }	
1A-9	Die Retaining Spring Nail ... { of }	.30
1A-10	Die Retaining Pin ..... { each }	
1A-11	Retaining Ring	1.65
1A-12	2-inch Guide	.65
	Interchangeable for Stock Nos. 1A and 1R	
1R-H	Ratchet Handle	$1.15
1A-12	Ratchet Guide ..... {	
1A-13	Ratchet Pawl ..... { one	
1A-16	Ratchet Pawl Knob ..... } of }	1.55
1A-15	Ratchet Spring ..... { each }	
1A-17	Ratchet Case Screws, each.....	.20
1A-18	Ratchet Case	3.55
1A-19	Ratchet Case Cover	1.45
1A-20	Taper Pin Plate.....	4.10
	Die Heads	
1A-11	Die Head for Stock Nos. 1 and 1A.....	$4.60
1R-11	Die Head for Stock No. 1R only.....	4.60
	Part for No. 1 Stock Only	
1-22	Taper Pin Plate.....	$3.05

NYE TOOLS

NYE No. 51 PIPE THREADER

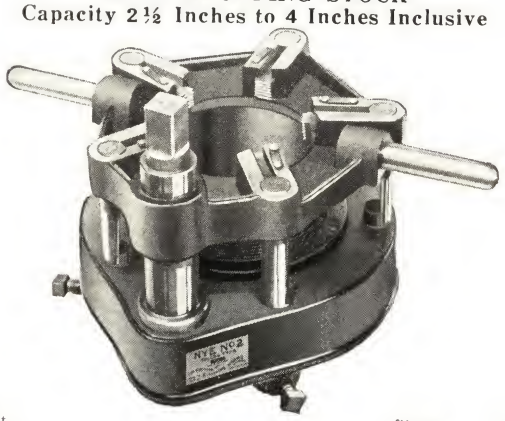


Uses only one set of dies—threads 1-, 1¼-, 1½- and 2-inch Pipe or Conduit. Cuts taper or conduit thread and opens automatically when thread is completed — cannot jam. Can be operated manually or with power drive. Has quick adjustment for size and Spinback feature.

Price, No. **51** Pipe Threader.....**$37.50**
(Chasers **$3.60** per set of four.)

NO. 2 RECEDING STOCK

Capacity 2½ Inches to 4 Inches Inclusive



Cat. No.	Item	Shpg. Wt. Lbs.	Price Each
N2-R4	Stock complete with ratchet handle, guides, and R. H. dies, 2½, 3, 3½, 4"	100	$85.00
N2-RO	Stock—less ratchet handle, guides, and dies.....	67¼	66.00
N2-RG	Guides (Bushings) 2½, 3, 3½, 4", each size.....	2¾	2.00
N2-RS	Set Screw, each.....	¼	.30



NYE DIE CHASERS FOR RECEDING STOCKS

Made from high grade alloy and high speed steel, hardened and tempered in oil. Cutting teeth milled, not tapped.

No. 1, 1-A, 1-R, 101 and 101-A

Cat. No.	Stock No. dies fit, and Sizes included (Specify size when Ordering)	Shpg. Wt. Lbs.	Price Set
N1-DC	No. 1, 1A, 1R, 101 and 101A—1, 1¼, 1½, 2". 4 Segments per sets of each size (alloy steel*)	1	$1.80
*	Available in high speed steel, when specified	1	2.35
N2-DC	No. 2—2½, 3, 3½, and 4". 5 Segments per set of each size (alloy steel)	2	5.85

NYE TOOLS

NYE HEAVY DUTY PIPE CUTTERS

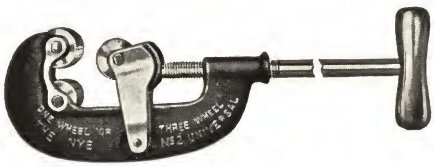


Solid malleable construction and all steel handle makes this an exceptionally dependable and durable tool. Wheel blocks travel on extra wide ways which assures continued alignment.

Cat. No.	Size Range	Shpg. Wt. Lbs.	Price Each
1N	⅛"–1¼" (Uses 1 and 2N Wheels, Pins and Rollers	6	$6.70
2N	⅛"–2"	7	8.95
4N	2"–4" (Uses 4N Wheels, Pins and Rollers)	17	30.00

NYE UNIVERSAL PIPE CUTTER

Improved (One or Three Wheel)



Hollow malleable body has strength with exceptional lightness and balance for easy operation. Guaranteed spring holds wheel block against screw handle. Standard equipment—two rollers and one Nye smooth edge wheel.

Cat. No.	Size No.	Cuts Pipe	Shpg. Wt. Lbs.	Price Each One Wheel	Price Each Soil Pipe 3 Wheels
N1-UC	1	⅛ to 1"	3	$6.70	.....
N2-UC	2	⅛ to 2"	6	8.95	$10.15
N4-UC	4	2 to 4½"	17¾	30.00	32.10

NYE BARNES TYPE PIPE CUTTER

Three Wheel Type

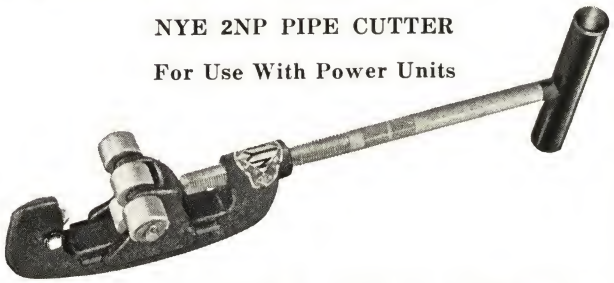
(Fits Fed. Spec. GGG-C-771—Fig. 1)



Cat. No.	Size No.	Cuts Pipe	Shpg. Wt. Lbs.	Price Each One Wheel	Price Each Soil Pipe 3 Wheels
N2-BC	2	⅛ to 2"	5	$8.95	.....
N4-BC	4	2½ to 4"	15	30.00	$32.10
N5-BC	5	4 to 6"	25¼	45.00	46.85
N6-BC	6	6 to 8"	30¾	60.00	61.85

NYE 2NP PIPE CUTTER

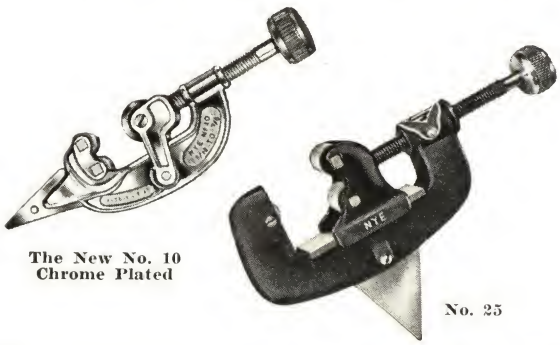
For Use With Power Units



Cuts pipe ⅛ to 2-inch. Cutter is self-aligning — assures square cuts, eliminates spirals. Three roller balancing — can be applied to pipe while pipe is in motion. Uses Nye 2N and 2R wheels. Price, No. **2NP** Pipe Cutter.....each **$10.50**

NYE TOOLS

NYE TUBE CUTTER WITH ROLLERS



The New No. 10 Chrome Plated

No. 25

Cat. No.	Tubing Capacity	Shpg. Wt. Lbs.	Price Each
N10C	3/16" to ⅞" O.D.	½	$2.45
N25C	½" to 2⅛" O.D.	2½	4.90
N10CW	Exceptionally keen cutter wheel for copper, brass and lead tubing for use in N10C	¼	.45
N25CW	Sturdier wheel for steel thin wall for use in N25C	¼	.45

NYE RATCHET REAMER



Specially ground, replaceable blades. Will ream as small as ¼ inch and as large as 3 inches.

Cat. No.	Item	Shpg. Wt. Lbs.	Price Each
NRR	Ratchet Reamer	6½	$9.90
NRR-B	Extra Blades, Each	¼	1.35

NYE BIT BRACE REAMERS



Made with tapered shank to fit any standard bit brace. Spiral flutes produce a shearing action, assuring operator a clean and satisfactory job. Made of tool steel, drop forged.

Cat. No.	Item	Shpg. Wt. Lbs.	Price Each
N42	⅛" to 1"	¾	$2.00
N42½	⅛" to 1¼"	¾	2.50
N44	¼" to 2"	1¼	4.75

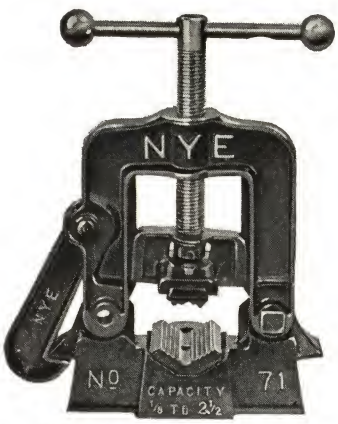
NYE QUALITY PIPE TAPS

Carbon steel. Briggs standard (N.P.T.) right hand taper pipe taps furnished.

Cat. No.	Pipe Size	Threads Per Inch	Shpg. Wt. Lbs.	Price Each
NT1	⅛	27	¼	$0.85
NT2	¼	18	¼	1.00
NT3	⅜	18	¼	1.35
NT4	½	14	¼	1.65
NT5	¾	14	¼	2.40
NT6	1	11½	¼	3.65
NT7	1¼	11½	¾	5.00
NT8	1½	11½	1¼	6.70
NT9	2	11½	3	9.95

NYE TOOLS

NO. 65R RATCHET PIPE THREADERS

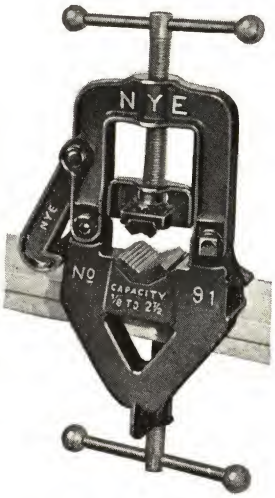


Nye Self-Locking Vise

Equipped with long jaws. Smallest rod sizes are held securely at either side of vise jaws.

Also, ⅛, ¼, ⅜-inch pipe are held securely at either side of jaws in the larger vises such as 72 or 73 vise.

Cat. No.	Pipe Size Capacity	Approx. Ship. Wt. Lbs.	Price Each	Cat. No.	Extra Jaws Price Per Set of Two
N700	⅛ to 1½"	6	$6.50	N7J	$2.40
N70	⅛ to 2"	8¾	7.95	N70J	2.65
N71	⅛ to 2½"	12	9.50	N71J	2.80
N72	½ to 3½"	21½	12.70	N72J	3.75
N73	½ to 4½"	27½	17.30	N73J	5.05



NYE CLAMP KIT VISE

Cat. No.	Pipe Size Capacity	Wt. Lbs.	Price Each
N900	⅛-1½	8	$7.25
N90	⅛-2	13¼	10.00
N91	⅛-2½	16¾	12.95

Extra Jaws—Set of Two

N9J	⅛-1½	.....	$2.40
N90J	⅛-2	.....	2.65
N91J	⅛-2½	.....	2.80



NYE CHAIN VISE NO. 61

This vise replaces the No. 51. It is compact, yet light and sturdy and has, in addition to long full-grip jaws, a pipe rest and bender, and the clamping handle conveniently located above the base.

Capacity ⅛ to 2½ inches.

Cat. No.	Pipe Size Capacity	Shpg. Wt. Lbs.	Price Each
N61	⅛" to 2½"	8¾	$5.90

Vises below similar to above, except for style of jaws, and no pipe rest or bender.

N52	¼" to 4"	15	$11.95
N53	¼" to 8"	37	28.70

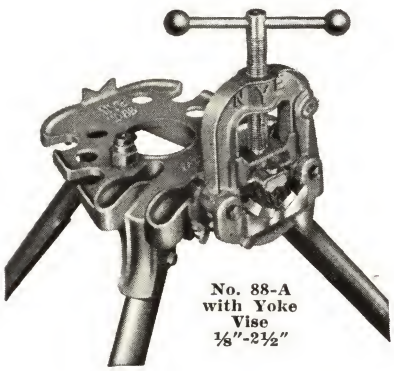
NYE TOOLS

NYE No. 88-A CONVERTIBLE COMBINATION VISE AND STAND

(Fully Guaranteed)

Designed to meet the need for an all-purpose vise and stand up to 4-inch capacity. Features:

1. Base designed so yoke vise parts (⅛" to 2½") can be replaced by chain vise parts (1" to 4"), or vice versa.
2. Locking arrangement for each leg for both open and closed positions — no chain required.
3. Reversible jaws.
4. Double socket efficiency benders for ½-inch and ¾-inch pipe.
5. Hole in rear of base tapped for standard 1-inch pipe threads — to accommodate extension pipe rest arrangement.



No. 88-A with Yoke Vise ⅛"-2½"



No. 88-B with Chain Vise 1"-4"

Cat. No.	Description	Shpg. Wt. Lbs.	Price Each
N88-A	Stand with Yoke Vise ⅛ to 2½" (convertible to 88B and C)	45	$26.95
N88-BP	Parts to convert N88-A to N88-B (incl. ext. pipe rest yoke)	2½	7.80
N88-B	Stand with Chain Vise ⅛ to 4" (incl. ext. pipe rest yoke)	43	28.75
N88-AP	Parts to convert N88-B to N88-A	4½	5.85
N88-C	Stand complete with all parts for N88-A and N88-B	47	33.80
N88-PR	Extension pipe rest yoke (included with No. N88-B)	1½	1.95

NYE TOOLS

NYE IMPROVED PIPE WRENCHES

Tempered Forged Jaws—Malleable Handle



Straight Wrench



Off-set Wrench

Size In.	Capacity Inches	Wt. Lbs. Each	Wt. Lbs. 6 Per Box	Complete All-Alloy Wrench	Handle Assembly Straight or Offset	Hook Jaw
			Straight or Off-Set			
6	¾	½	2½	**$1.90**	**$1.75**	**$0.65**
8	1	¾	5	**2.20**	**1.95**	**.70**
10	1½	1¾	10¾	**2.85**	**2.50**	**1.10**
14	2	3½	20½	**3.85**	**3.45**	**1.50**
18	2½	5¼	32	**5.50**	**4.95**	**2.15**
24	3	8¾	52	**9.50**	**7.95**	**3.50**
36	4½	16¼	.....	**20.00**	**15.00**	**5.70**
			Straight Only			
48	6	28	.....	**30.00**	**25.00**	**9.00**
60	8	43¼	.....	**45.00**	**35.00**	**17.00**

TOLEDO RATCHET PIPE REAMERS



No. 182 is a small, compact, all steel pipe or conduit reamer. The multiple tooth reamer head is made from one piece of heat-treated alloy steel and with accurately ground teeth. It feeds easily with only slight pressure, and leaves a smooth, clean cut. The cutting teeth can be readily resharpened or the reamer head replaced at small expense. Cutter blades of the No. 383 reamer are cast solidly in the head and are made of high speed steel. They will outwear ordinary blades and ground with proper clearance for each size pipe assure easier cutting. Readily resharpened or when worn out the entire head can be replaced at moderate cost.

The convenient Toledo hand grip provides an easy natural position for holding the reamer. Polished tubular handles are light in weight and unbreakable. Parts that become worn may be easily replaced without purchasing complete new tools.

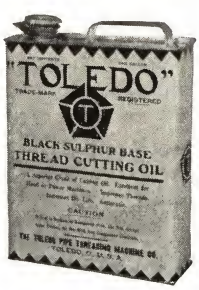
Description	Shpg. Wt. Lbs.	Price Each
No. **182** Ratchet Pipe Reamer, ⅛ to 2 inches.....	5	**$9.00**
No. **383** Ratchet Pipe Reamer, ⅜ to 3 inches.....	8	**12.00**

TOLEDO THREAD-CUTTING OIL

BLACK SULPHUR BASE THREAD-CUTTING OIL

High grade, superior thread-cutting oil. It is antiseptic, will not turn rancid, and assures smoother, cleaner threads, tighter joints and increased die service.

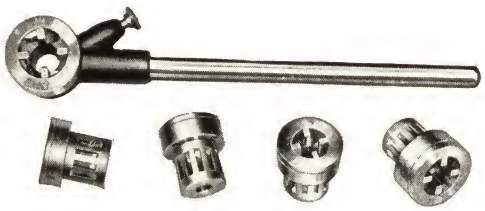
Sold only in sealed, red lithographed 1 gallon trade marked cans or sealed lithographed 5 gallon trade marked pails at a net price of **$1.20** per gallon, plus Federal Tax. Weight—5 gallon pail, 43 lbs.; 1 case of 6 gallon cans, 53 lbs.



1-Gallon Can

TOLEDO PIPE TOOLS

SMALL RATCHET THREADERS



Light and compact. Handy for close quarter work. Die heads changed instantly. Die segments can be removed easily for regrinding or replacement. Complete tool consists of ratchet handle and ⅛, ¼, ⅜, ½ and ¾-inch die heads complete with right hand dies. No additional charge for tool furnished for threading conduit.

No. 00 Ratchet Threader

Size Pipe Inches	Ship. Wt. Lbs.	Price Each	Size Pipe Inches	Ship. Wt. Lbs.	Price Each
⅛ to ¾	9¾	**$19.90**	⅜ to ¾	7	**$13.30**
¼ to ¾	8¼	**16.60**	½ to ¾	5½	**10.00**

Die Heads with R.H. Dies

⅛	2	**3.30**	½	2	**3.50**
¼	2	**3.30**	¾	2	**3.50**
⅜	2	**3.30**			

Ratchet Handle only, complete..... **3.00**

NO. 11 RATCHET THREADING DEVICE

Similar to the No. 00 but larger. Covers the full range from ⅛-inch to 1¼-inch if desired. No additional charge when furnished with conduit dies.

Size Pipe Inches	Ship. Wt. Lbs.	Price Each	Size Pipe Inches	Ship. Wt. Lbs.	Price Each
½ to 1¼	13	**$18.50**	¼ to 1¼	16	**$25.50**
½ to 1	10	**14.50**	¼ to 1	14	**21.50**
⅛ to 1¼	22	**29.00**	⅜ to 1¼	14	**22.00**
⅛ to 1	19	**25.00**	⅜ to 1	12	**18.00**

Die Heads with R.H. Dies

⅛	2	**3.50**	¾	2	**3.50**
¼	2	**3.50**	1	2	**4.00**
⅜	2	**3.50**	1¼	2	**4.00**
½	2	**3.50**	Ratchet only		**3.50**



3-WAY THREADING DEVICES

A fully self-contained tool, perfectly balanced. Designed to prevent clogging with dirt or chips. Dies easily removed and reground or replaced at small cost. No extra charge when furnished with conduit dies.

No. 30			No. 31		
Size Pipe Inches	Ship. Wt. Lbs.	Price Each	Size Pipe Inches	Ship. Wt. Lbs.	Price Each
⅜ to ¾	5½	**$10.00**	½ to 1	8½	**$12.00**

Dies Only R.H.

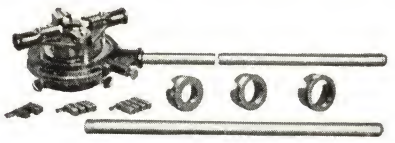
⅜", ½" or ¾" **$1.80** per set. 1" size **$2.20** per set.

TOLEDO PIPE TOOLS

PLAIN AND RATCHET THREADING DEVICES

Adjustable Plain Threading Device No. 1

Adjustable Ratchet Threading Device No. 1A



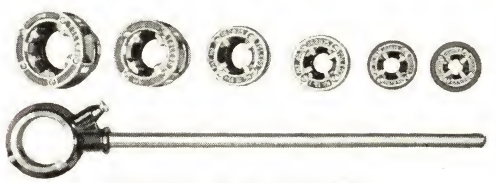
These models were of the first of the so-called easy operating threaders and for years have been considered by users as the "last word" in 1 to 2-inch threading tools. It may be instantly adjusted for cutting over and under size as well as standard threads and produces perfectly true tapered threads at all times.

The complete tool consists of the tool body, two handles, complete set of 1 to 2-inch right hand dies and bushings.

It can also be furnished at a slightly higher price (reversed in all its parts) for cutting left hand threads — neither tool will do both.

Cat. No.		Pipe Size Inches	Ship. Wt. Lbs.	Price Each
No. 1	Plain	1 to 2	19	**$20.00**
No. 1A	Ratchet	1 to 2	24	**22.00**

No. 12 RATCHET THREADING DEVICE



Capacity—½ to 2-inch Pipe

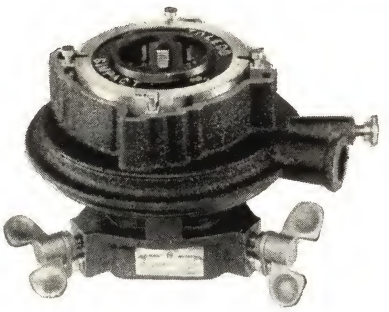
This ratchet tool is light and compact and it reaches the difficult corner job. Threads pipe easily and produce perfect tapered threads. Die heads are changed instantly by pulling the ratchet pawl knob, dropping out one head and inserting desired size. Die segments can be removed when dull and be easily reground or replaced at small expense without having to order complete new die heads.

Can be furnished with special dies for threading ½, ¾, 1, 1¼, 1½ and 2-inch electric conduit. Is an excellent tool for threading brass or copper.

Complete tool consists of the ratchet hande, ½, ¾, 1, 1¼, 1½ and 2-inch die heads with dies. ⅛, ¼ and ⅜-inch sizes can be furnished.

Description	Shpg. Wt. Lbs.	Price Each
No. 12, Complete ⅛ to 2 inches	35	**$49.00**
No. 12, Complete ¼ to 2 inches	31½	**44.50**
No. 12, Complete ⅜ to 2 inches	29	**40.00**
No. 12, Complete ½ to 2 inches	26¼	**35.50**
No. 12, Complete ¾ to 2 inches	23¾	**31.00**
No. 12, Complete 1 to 2 inches	21	**26.50**
Ratchet	6	**4.50**
⅛-inch Die Head with R.H. Dies	3	**4.50**
¼-inch Die Head with R.H. Dies	3	**4.50**
⅜-inch Die Head with R.H. Dies	3	**4.50**
½-inch Die Head with R.H. Dies	3	**4.50**
¾-inch Die Head with R.H. Dies	4	**4.50**
1 -inch Die Head with R.H. Dies	3	**5.00**
1¼-inch Die Head with R.H. Dies	3	**5.00**
1½-inch Die Head with R.H. Dies	4	**5.50**
2 -inch Die Head with R.H. Dies	4	**6.50**

TOLEDO SIMPACT ADJUSTABLE RATCHET THREADING DEVICE



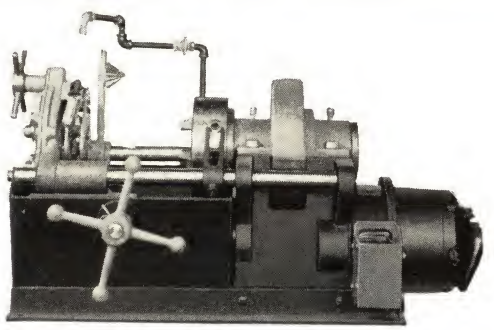
The Toledo Simpact is a self-contained 1- to 2-inch ratchet pipe threader. It has few moving parts, is light in weight, yet strong and sturdy, and will give years of satisfactory service.

Dies are made of finest grade high speed steel and can be reground when dull. The 3-jaw pipe holder is designed for easy handling and accurate centering. Complete tool consists of tool body, one set of 1- to 2-inch high speed dies, and 24-inch tubular handle. Will thread a pipe projecting through a wall as short as 6¼ inches.

Size Pipe Inches	Description	Net Wt.Lbs.	Shpg. Wt.Lbs.	Price
1 to 2	Simpact, complete	20¼	24	**$26.00**
Dies, R.H. 1" to 2", per set		¾	1	**3.60**

TOLEDO PIPE MACHINE

NO. 999 PORTABLE POWER PIPE MACHINE

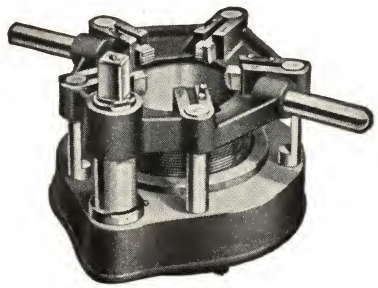


An efficient small, compact, portable ½ to 2-inch power pipe machine. The ½ HP ball bearing Universal motor operates from any 115 volt lamp socket. Other motors quotation on request. Can be furnished in any of the various combinations outlined below, complete with dies, bushings, complete set of four cutter blades, chuck wrench, cutter blade wrench, 10 feet of cable with connectors and 1 gallon of thread-cutting oil. Standard Model same as Super-Model except has non-opening die heads and dies. Either machine can be furnished with steel stand, either open or enclosed type, and with or without 16-inch rubber tired or steel tired wheels. Either machine can also be furnished with ⅛, ¼ or ⅜-inch dies if desired. Shipping weight Standard Model 445 pounds. Super Model 465 pounds.

No.	Description	Price
999	Super, 6 Q.O. Die Heads, ½" to 2"	**$600.00**
999	Super, 3 Q.O. Die Heads, ½" to 2"	**528.00**
999	Super, 3 Q.O. Die Heads, ⅛" to 2"	**546.00**
999	Standard Model, ½" to 2"	**478.00**
999	Standard, ⅛" to 2"	**505.00**

TOLEDO PIPE THREADING DEVICES

GEARED ADJUSTABLE THREADING DEVICES No. 2 and 2BR



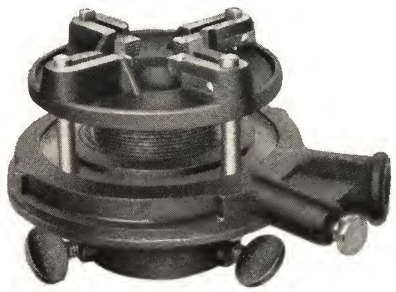
No. 2—This model utilizes the "Toledo" receding die principle. Lighter than any other tool of same capacity. Ratchet handle is 36 inches long. Overall of tool body from tip to tip of lifting handles is 16 inches long.

Complete tool consists of the tool body, complete set of 2½- to 4-inch right hand dies and bushings, set screw wrench, and a ratchet handle, all packed in a strong carton.

No. 2BR—This tool is the same in design as the No. 2, except it is equipped with a 3-jaw pipe holder. This construction is more positive and longer lived than any cam operated mechanism. No bushings are needed. The complete tool consists of the tool body, complete set of 2½- to 4-inch right hand dies, set screw wrench and ratchet handle, all packed in a strong carton.

Description	Wt. Lbs. Shpg.	Wt. Lbs. Net	Price
No. 2, for Conduit, 2½ to 4-inch	100	85	**$92.00**
No. 2BR, for Conduit, 2½ to 4-inch	99	81½	**98.00**

No. 1R THREADER—ADJUSTABLE RATCHET



Perfect threads produced by separate Toledo Dies for each pipe size. Toledo dies are made of the finest grades of tool steel. Because of the higher peripheral cutting speed at which 2-inch dies operate they are made of high speed steel. Simple in design with one ratchet handle, complete for 1-, 1¼-, 1½-, 2-inch sizes. Complete tool consists of the tool body, one handle, and a complete set of 1- to 2-inch R.H. dies and bushings. Handle is 24 inches long, overall length, 32 inches.

Description	Wt. Lbs. Shpg.	Wt. Lbs. Net	Price
No. 1R, R.H. for Conduit, complete 1- to 2-inch	22	20	**$23.00**

TOLEDO PIPE TOOLS

No. 101 FULL-MOUNTED ADJUSTABLE BOLT DIE STOCKS



Where time is an important factor, the No. 101 full-mounted bolt die stock set is the ideal tool for threading bolts. Separate full-mounted die stocks each with a separate set of bolt dies ¼, 5/16, ⅜, 7/16, ½ and ⅝-inch, either N.C. or N.F. — all packed in a strong red metal box. Each tool measures 17 inches overall.

Patented die adjustment. Cutting edges of the segments are simultaneously moved in or out by turning the knurled sizing ring. Dies can be quickly set for deep, shallow or standard threads. Each die segment, even when the standard setting is changed, takes a proportioned share of the work, which makes easier cutting, smoother threads and longer die life. Dies are easily resharpened.

Cat. No.	Shpg. Wt. Lbs.	Net Wt. Lbs.	Price Each
101*	30	20	**$43.80**
101‡	3	2¾	**5.40**

*Complete set of sizes ¼ to ⅝ inch with box.

‡Stock for one size only.

MALLEABLE OPEN-SIDE PIPE VISES

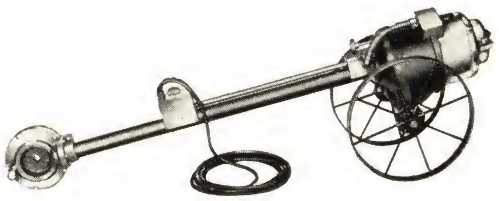


Practical and convenient quality built pipe vises that eliminate the need of unlatching and tipping back a yoke for lengths of pipe. Simply slip the pipe in the open side and tighten the jaws. Handles are extra long, permitting easier setting of the vise jaws. Jaws in the No. 00 Vise are 2¼ inches long, No. 0 Vise 2½ inches and No. 3 Vise 3¼ inches long. Handle of No. 00 Vise is 9 inches long, No. 0 Vise 11 inches long and No. 3 Vise 14 inches long. Both upper and lower jaws are heat-treated steel, full overlapping and will hold all pipe perfectly. Jaw construction permits working close to the face of the vise. Jaws easily replaced when dull. Frame is made of malleable iron.

Cat. No.	Capacity	Shpg. Wt. Lbs.	Net Wt. Lbs.	Price Each
00	⅛ to 1½-inch Pipe	6¾	6	**$8.00**
0	⅛ to 2½-inch Pipe	12	11¼	**10.00**
3	⅛ to 4½-inch Pipe	27	26½	**18.00**

TOLEDO POWER DRIVE

STANDARD POWER DRIVE



The Toledo Power Drive is designed to operate on hand threading and cutting devices by electricity, and thus increase their efficiency. It is also used to turn sheet metal rolls, operate hoisting winches to pull electric cable through conduit and many other machines requiring hand cranking methods of operation.

The driving head is furnished with two driving bushings which fit the two sizes of pinions used on the various Toledo tools. At slow speed it rotates at 38 R.P.M. and on high speed at 57 R.P.M. Can be furnished with A.C. single phase motor, 115-230 volt; A.C. 3 phase motor 220-440 volt. Other motors quoted on request.

The motors used in the Standard model Drives are supplied for A.C. 1½ H.P. They are more powerful than the household type of motor and should not be connected to a lamp socket of the ordinary household system. Twenty feet of flexible cable furnished with each drive. Length of Drive over all is approx. 6 feet. Net weight 240 lbs., shipping weight 350 lbs. The iron wheels are 18 inches in diameter.

Price, Standard Power Drive.....**$320.00**

UNIVERSAL POWER DRIVE



Toledo Universal Power Drive with a ½ H.P. universal motor will operate from a light socket on any 115 volt current. It may also be furnished with a 230 volt universal motor. Unlike the other models, has a reversible motor so the operator may back the dies off the completed thread by power.

The motor automatically adjusts speed to load, increasing power and decreasing speed on light loads. When under load driving bushing rotates about 30 R.P.M.

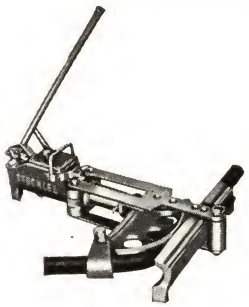
This Universal Drive weighs only 165 lbs., is strongly built and will give years of satisfactory service. While it will operate Toledo Tools for cutting and threading pipe up to and including 12 inches yet it is not as powerful, fast or efficient as the Standard Drive. A rubber covered cable 20 feet long is furnished with each power drive.

Large gate valves and sluice gates which are usually manually operated are opened or closed with the Universal Power Drive at great saving in time and hand work. Motor is reversible and will rapidly open or close the gate.

Price, Universal Power Drive.....**$260.00**

GREENLEE HYDRAULIC BENDERS

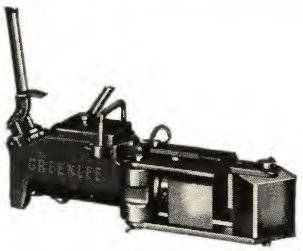
No. 770-R FOR SMALL PIPE



Powered with No. 770 unit, but equipped with attachments for bending small conduit and pipe in these sizes: ½, ¾, 1, 1¼, 2-inch. Especially adaptable to radiant heating installations. Makes, accurate smooth bends; no kinking, wrinkling or crushing. Full 90-degree bend with one forward stroke of ram. One man operated. Portable.

Cat. No.	Description	Wt. Lbs., Each	Price Each
770-R	Small Pipe Bender complete for ½ to 2-inch.....	360	**$330.50**
770-R	Attachments only ½ to 2-inch	270	**220.50**

Nos. 770 and 775-BB BUS-BAR BENDERS



For making accurate U-Bends in a wide range of sizes. No. 770 power unit for material up to 4 inches wide, ¾-inch thick. No. 775 power unit for material up to 5¾-inch width, 1-inch thickness.

Attachments fit Nos. 770 and 775 power units now in use.

Cat. No.	Description	Wt. Lbs., Each	Price Each
770-BB	Bus-Bar Bender Complete	155	**$140.00**
770-BB	Bus-Bar Bender Attachments only	55	**30.00**
775-BB	Bus-Bar Bender Complete	235	**212.50**
775-BB	Bus-Bar Bender Attachments only	80	**75.00**

GREENLEE HAND BENDERS



No. 761 for fast, easy bending of pipe or rigid conduit in ⅛, ¼, ⅜ and ½-inch nomal sizes.

No. 764 for thin-wall conduit (E.M.T.). Quickly bends conduit of ⅜, ½, and ¾-inch nominal sizes.

Cat. No.	Nominal Size	OD Dimens.	Center Radius	Price Each
761	⅛ pipe	.405	1⅜	**$12.00**
	¼ pipe	.540	1¼	**14.00**
	⅜ pipe	.675	1⅝	**17.50**
	½ pipe and rigid conduit	.840	2⅛	**21.50**
764	⅜	.580	1⅝	**14.00**
	½	.710	1⅞	**17.50**
	¾	.925	2½	**22.50**

GREENLEE HYDRAULIC BENDERS

No. 770-T THIN-WALL CONDUIT BENDER



Powered with the No. 770 unit, but with complete attachments for bending thin-wall electrical metallic tubing — without crushing. Quick acting — one forward stroke of ram makes a full 90-degree bend. Portable, easily set up.

Regular attachments furnished bend ¾, 1, 1¼, 1½ and 2-inch sizes of thin-wall conduit. Any No. 770 Bender now in use can be equipped with these easily applied attachments.

Cat. No.	Description	Wt. Lbs., Each	Price Each
770-T	Thin-Wall Conduit Bender complete for 1¼ to 2-inch	266	$230.00
770-T	Thin-Wall Conduit Bender complete for ¾ to 2-inch	350	275.00
770-T	Attachments only 1¼ to 2-inch	190	120.00
770-T	Attachments only ¾ to 2-inch	260	165.00

Nos. 770 and 775 HYDRAULIC BENDERS



No. 770 Bender with Standard Set of Shoes

With a Greenlee one man quickly gets the desired bend by pumping the handle for powerful hydraulic force. Bends are smooth, accurate — no kinking or damage to conduit or pipe.

No. 770 Hydraulic Bender illustrated above, with standard equipment, bends 1¼, 1½, 2, 2½ and 3-inch conduit and pipe. Extra attachments available for bending ½, ¾ and 1-inch sizes. Maximum piston pressure, 50,000 pounds.

No. 775 Hydraulic Bender is similar in design to the No. 770, but of larger size, heavier weight and powered to bend these larger sizes of conduit and pipe: 3, 3½, 4 and 5-inch. Maximum piston pressure, 80,000 pounds. Can be furnished with extra shoes and supports for bending 8 sizes of pipe from 1¼ to 5-inch.

Cat. No.	Description	Wt. Lbs., Each	Price Each
770	Complete for 1¼ to 3-inch	215	$170.00
775	Complete for 3 to 5-inch	400	235.00

GREENLEE HYDRAULIC BENDERS

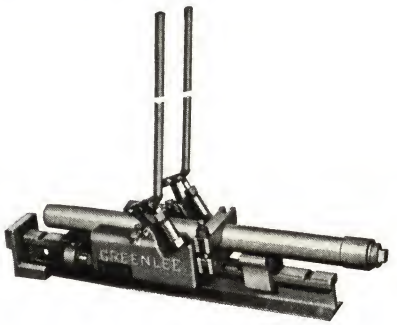
PARTS PRICE LIST

For Greenlee Hydraulic Conduit Benders No. 770 and No. 775

Part No.		Price Each
AA303	Injector Lever	$ 4.00
AA305	Injector Shell	6.00
AA306	Injector Packing Nut	1.50
AA307	Injector Nut	2.00
AA308	Injector Plunger	2.00
AV877	Injector Lever Links, 2 required	.35
AV878	Plunger Pin	.20
AA311	Injector Lever Pin	.20
AA312	Lever Link Shaft	.25
770-2	Vent Plug complete	2.25
770-7	Injector Lever Handle Assembly	1.75
AA319	Injector Packing Washers, 2 required	.10
AA452	Reservoir Gasket	.10
AV464	Discharge Spring Screw	.35
AV469	Intake Spring	.10
AV470	Discharge Spring	.10
AV621	Discharge Spring Cup	.20
1109AA	Intake Spring Plunger	.20
1110AA	Intake Plug with 1112AA Washer	.35
AA317	Piston Adjusting Rod, complete with AA318 Piston Lever and AA321 Stud for No. 770	4.20
AA322	Safety Valve for No. 770-775	1.00
AA453	1¼" Shoe for No. 770	4.00
AA454	1½" Shoe for No. 770	5.00
AA455	2" Shoe for No. 770	6.00
AA456	2½" Shoe for No. 770	8.00
AA457	3" Shoe for No. 770 and 775	9.00
AA458	Support Castings for No. 770, 2 required	5.00
AA466	Connecting Bars for No. 770, 4 required	1.85
AA467	Upper Cross Bar	2.40
770-6	Lower Cross Bar	2.40
AV540	Cylinder Head Pins for No. 770, 2 required	1.00
1272AA	Support Casting Pins for No. 770, 2 required	.80
1846GB	Cup Retaining Screw for No. 770	.20
508GB	Oil Seal for No. 770	1.00
AA623	Neoprene Cup for No. 770	2.00
698GB	Cup Disk for No. 770	.20
AA405	Piston Adjusting Rod complete with AA406 Piston Lever, and AA321 Stud for No. 775	4.35
AA1605	Support Castings for No. 775, 2 required	8.00
AA567	3½" Shoe for No. 775	11.50
AA568	4" Shoe for No. 775	14.00
AA1601	5" Shoe for No. 775	16.50
AA588	Cylinder Head Pins for No. 775, 2 required	1.25
1269AA	Support Casting Pins for No. 775, 2 required	1.25
AA1606	Upper Cross Bar for No. 775	6.50
775-6	Lower Cross Bar for No. 775	9.00
AA1607	Connecting Bars for No. 775, 4 required	4.50
1866GB	Cup Retaining Screw for No. 775	.30
AV624	Leather Cup for No. 775	2.60
AA776	Cup Disk for No. 775	.25
511GB	Oil Seal for No. 775	1.60

GREENLEE HYDRAULIC PIPE PUSHERS

MODEL No. 790 PIPE PUSHER



Pipe for gas, water supply, sewer and other purposes, conduit for electricity and telephone cable is easily installed underground, without expensive trenching, with a Greenlee hydraulic pipe pusher.

For pipe ¾ to 4-inch size inclusive. Six operating speeds with pushing pressures ranging from 6500 to 40,000 pounds. Power unit travels on notched steel base, supplied in 5½, 6½, 7½ and 8½ ft. lengths, permitting pushes of from 4 to 7 feet between changes of pipe clamp. Each base equipped with one backing plate and two pipe supports. Weight, power unit only, 160 pounds.

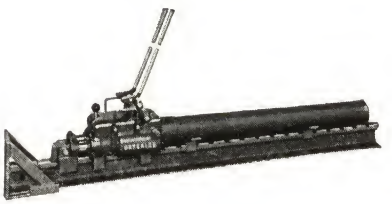
Price, No. **790** Power Unit only.....each **$185.00**

Steel Bases, complete with pipe support and backing plate:

Base Ft.	Push Ft.	Wt. Lb.	Price Each	Base Ft.	Push Ft.	Wt. Lb.	Price Each
5½	4	145	**$30.00**	7½	6	185	**$40.00**
6½	5	165	**35.00**	8½	7	205	**45.00**

Quick-Acting Clamps for following pipe sizes: ¾", 1", 1¼" each **$10.00**; 1½" **$10.75**; 2" **$11.50**; 2½" **$12.75**; 3" **$15.00**; 3½" **$17.50**; 4" **$22.50.**

MODEL No. 795 PIPE PUSHER



This 75-ton pusher handles large drainage ducts, concrete sewer pipe and pipe beyond 4-inch. Six operating speeds develop piston pressures from 25,000 to 150,000 pounds. Two machines can be used in pushing very large drainage ducts.

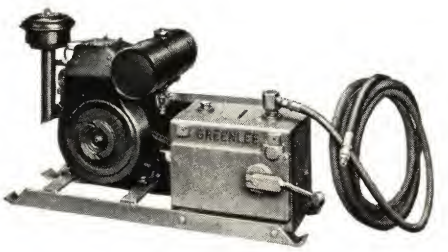
Notched steel base is furnished in lengths to suit pipe or duct to be handled—should be three feet longer than section of pipe to be pushed. Pipe is pushed from the end, without using pipe clamps.

Weights—Power unit only, 280 lbs.; base and equipment, per foot, 30 lbs.

Price, No. **795** Power Unit only.....each **$325.00**
Base and equipment.....per foot **10.00**

GREENLEE HYDRAULIC PIPE PUSHERS

MODEL No. 797 DOUBLE ACTION POWER PUMP



Available for attachment to either Greenlee Nos. 790 or 795 Hydraulic Pipe Pushers. Reciprocating pump driven by 3 h.p. gasoline engine, forces oil through 15-foot high pressure hose to the hydraulic power unit, forcing unit forward on the base. Attached to either 790 or 795 pusher, toughest jobs can be done quickly by one man. Available with or without motor.

Greenlee No. 797 Power Pump with 3 H.P. gasoline motor, pulleys, belt guard, but without hose..... **$442.00**

Greenlee No. 797 Power Pump equipped as above but without gasoline motor.... **328.00**

Greenlee No. 797 Power Pump with 2 V-belts, pulleys and guard for electric motor drive but without motor and control **334.00**

15 Feet of 2-wire, high pressure hose with fittings for use with Pipe Pushers **19.00**

6 Feet of 2-wire, high pressure hose with fittings for use with Pipe Benders..... **8.70**

Power Pump can also be used with Greenlee Nos. 770, 770-T, 770-R and 775 Benders.

T & B LAKIN HICKEY



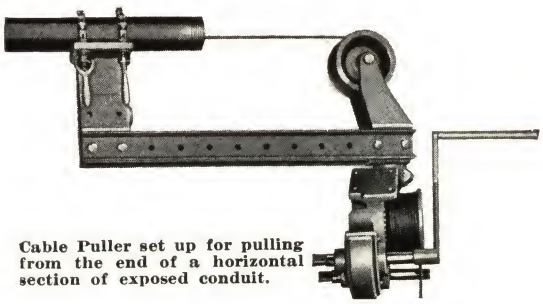
Made in three sizes. Shank is extra long assuring great strength. Shank has bushed hole designed to slip over end of conduit for making short bends at end of conduit. Bushed opening in shank fits snugly over end of conduit and prevents damaging threads while bend is being made.

Cat. No.	Size Inch	Std. Pkg.	Price Each	Cat. No.	Size Inch	Std. Pkg.	Price Each
335	½	10	**$2.95**	**337**	1	2	**$8.15**
336*	¾	10	**4.70**	------	--	--	--------

*Can also be used to bend ½-inch pipe.

GREENLEE CABLE PULLER

No. 765 CABLE PULLER AND FLEXIBLE ELBOW ATTACHMENT

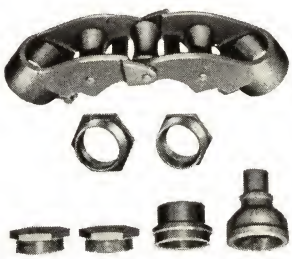


Cable Puller set up for pulling from the end of a horizontal section of exposed conduit.

Cable pulling has always presented difficulties to the electrician, due to the cumbersome, heavy equipment used and to the trouble of properly anchoring it. It provides maximum power, ease of operation, portability, and convenient, positive anchorage.

The machine will exert a maximum pull of 7500 pounds, and it has two speeds, through a direct gear and through a back gear. A shear pin is provided in the back-gear shaft to prevent damage under excessive pull, and a dog on the back gear prevents unwinding of the cable in event of the pin shearing. Two cranks are supplied, but if preferred, ratchet wrenches can be used. A portable electric power unit can also be used for driving the machine. The puller is readily portable, since it has a net weight of only 170 pounds.

In exposed work the clamping is done directly onto the conduit through which the cable is to be pulled. The clamping device consists of a bracket on the frame and two lengths of pipe wrench chain. While regularly rated for conduit from 2 to 4-inch the clamp will accommodate 5-inch conduit.



Flexible Elbow Attachment

For pulling cable into concealed conduit, where the regular clamping device cannot be used, an attachment can be furnished, which makes it convenient to use the puller without its frame and provides for placing it at any distance from the end of the conduit.

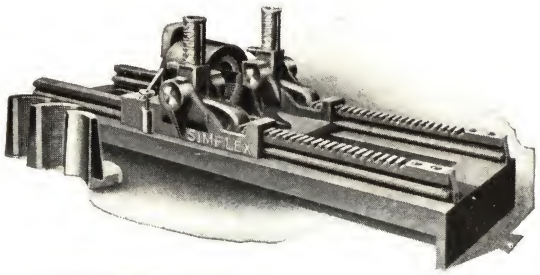
This attachment consists of a flexible elbow, a 4-inch master sleeve, bushings for 2, 2½, 3, and 3½-inch conduit, two unions for the small bushings to permit using them in close quarters, and a 4-inch to 2-inch reducer.

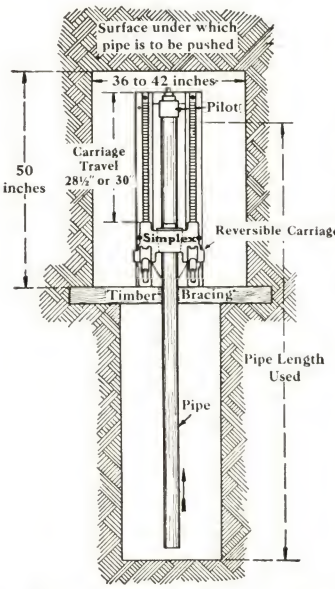
Cable is not furnished with the machine, and it is recommended that a ⅜-inch 6-19 strand, having a breaking strength of 11,000 pounds or more, should be used.

Cat. No.	Description	Shpg. Wt. Lbs.	Price Each
765	Cable Puller with 2 cranks, but without cable	225	$160.00
.....	Flexible Elbow Attachment	86	40.00

SIMPLEX DOUBLE LEVERAGE PIPE PUSHING AND PULLING JACKS

No. R-334A





Operating Instructions

For method of operation refer to sketch which details size of trench and cross timbering. Dig trench approximately 8 inches below center of pipe to be pushed. For sighting direction and depth of pipe travel, use 3 sticks or sighting rods of equal length. After pipe has been pushed the full length of carriage travel, remove lever bars, disengage pawls from rack bar, loosen driving jaw and reset.

No. R-334A has a reversible carriage which eliminates the necessity of reversing the complete Pipe Pusher to pull pipe.

The double levers and double track insure accurate, powerful and economical pushing of pipe under paved streets, alleys, tracks, lawns, sidewalks, etc. Pipe can be pulled for lead pipe and duct installations, etc., or "backed out" by reversing the carriage. The tapered steel jaws completely surround the pipe, preventing crushing or flattening. The design, material analysis, and simplicity of these Jacks, result in many years of profitable operation without maintenance cost.

The double levers can be operated singly, alternately or together, depending on the type of soil, size of pipe, or speed or operation desired, etc.

No. R-334A will push pipe 2 to 4 inches in diameter. Specify size, or sizes, of pipe to be pushed. An adapter, furnished at **$41.00** additional list price, enables the No. R-334A to push ¾ to 2-inch pipe.

Jack No.	Capacity Tons	Travel Inches	Wt. Lb. Complete	Wt. Lb. Jack Only	List Price Complete	Extra Jaws Per Set
R-334A	25	28½	321	208	$320.00	$49.50

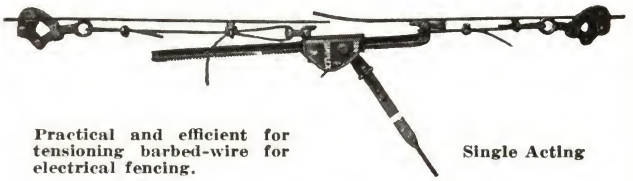
Equipment—One set tapered jaws, one pilot, two 4′ steel lever bars and two steel pipes for extending lever bars. Specify size of jaws and pilot required.

For average soil conditions we recommend the following: 1″ pipe for 25′—2″ for 50′—3″ for 75′—4″ for 100′. Not practical in dry sand.

EXTRA JAWS AND PILOTS

For	Size In.	List Price, Each — Jaws	Pilot
R-334A	2, 2½, 3, 3½, 4	$49.50	$6.60

SIMPLEX AERIAL CABLE AND WIRE TENSIONING JACK



Practical and efficient for tensioning barbed-wire for electrical fencing.

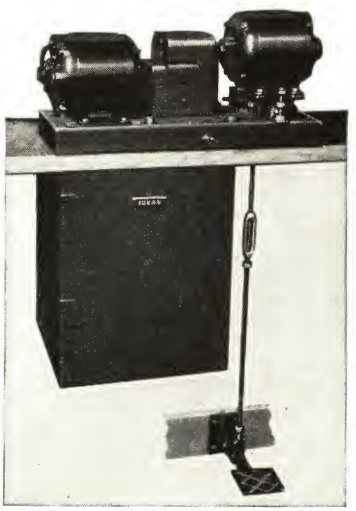
Single Acting

Sufficiently powerful to easily pull up over-head and underground cables and to take up slack in trolley and guy wires. Because it weighs only 13 pounds, it does not handicap a man in overhead work. The speed-trigger permits instant slack "take-up" at any point when the jack is not under load. The steel lever is furnished with a safety spring clip that prevents it from falling off.

For tensioning bare wire use two bare wire grips and two wire slings (see illustration). When used for splicing overhead cable, special equipment consisting of two double-eye split cable grips, two 3-bolt clamps and two wire slings, is needed.

Jack No.	Capacity Tons	Travel Inches	Wt. Lbs. Each	List Price
324	2	20¼	13	**$32.00**

IDEAL TWO MOTOR ELECTRIC BRUSH TYPE STRIPPER



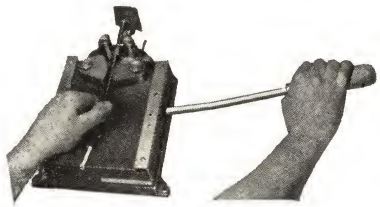
A production Stripper—solves difficult problem of stripping and cleaning cotton and enamel, silk and enamel, string asbestos and other types of light insulation. Each brush driven by a separate motor. Dust and dirt of stripping are removed by separate motor driven blower and dust collector. Complete with foot pedal assembly and two 10-section brushes 1½ inches diameter x 2-inch face x ⅝-inch arbor hole x .004-inch wire.

Cat. No.	Description	Price Each
45–070	115 volt, 60 cycle unit complete	**$418.00**
45–072	230 volt, 60 cycle AC unit	**451.00**
L3010-1	Extra brushes (.0025 wide)†	**.96**
L3011-1	Extra brushes (.0040 wide)†	**.72**
L3012-1	Extra brushes (.0060 wide)†	**.72**
L3013-1	Extra brushes (.0090 wide)†	**.82**

†Price per section.

IDEAL WIRE STRIPPING EQUIPMENT

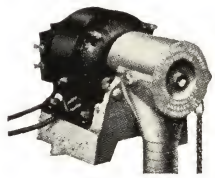
LEVER TYPE CABLE AND WIRE STRIPPER



For stripping all kinds of single and parallel conductors. Strips rubber insulation, asbestos, synthetic (plastic), glass, cambric, etc. Strips cables up to ⅝ inch diameter — any length. Easy to operate. Straight line pull eliminates scraping and nicking of wire. Well suited for large volumn stripping. Blades are quickly interchangeable. Furnished with set of plain blades for stripping parallel wire, heater cord, inner conductor and P.O.S.J. cord. Grooved blades to accommodate other sizes and types of wire are available in 15 standard sizes, and can be furnished at slight extra charge.

Price, No. **45-064**—Stripper including one set plain blades.....each **$198.00**

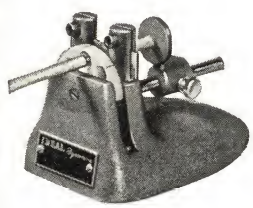
ROTARY TYPE WIRE STRIPPER



For production stripping. Strips all types of solid or stranded wire up to a maximum of ½ inch outside diameter. Motor is reversible at the flip of a switch, permitting either clockwise or counter-clockwise stripping according to natural twist of wire. Wire after stripping is properly twisted and polished, ready for terminals or soldering. Easy to operate — simply insert wire, step on foot pedal and give a quick pull on wire being stripped. Cutting blades are of finest tool steel, double edged. Blades may be sharpened repeatedly. Furnished with ⅛, ¼ and ⅜ inch guide bushings.

Price, No. **45-009**—115 volt, 60 cycle .....each **$275.00**

BENCH TYPE WIRE STRIPPER



For stripping solid or stranded wire up to $\frac{5}{16}$ inch diameter. Has 8 hole dial wire guide to center different sized wire between cutting blades. Furnished with set of plain blades for stripping parallel wires, heater cords, inner conductors, P.O.S.J. cord, etc. Special grooved blades for stripping rubber, asbestos, and other similar covered wire may be secured at slight extra charge. Mounts on a bench leaving hands free for stripping. Easy to operate — just insert wire between oscillating blades to the adjustable stop, then a quick jerk cleanly and quickly removes the insulation. Eliminates guess work and prevents nicked wires and cut strands.

Price, No. **45-069**—including one set (2) plain blades .....each **$46.20**

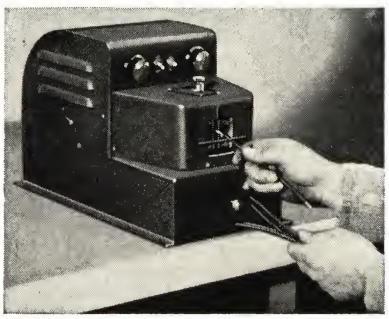
IDEAL WIRE STRIPPING EQUIPMENT

HANDI-GRIP WIRE SKINNER AND WIRE STRAIGHTENER

A handy tool designed to cut and strip insulation, scrape wire and straighten kinks and sharp bends. Hardened tool steel blades have the cutting edges hollowed in the center to prevent wire from slipping out of the tool. Blades are removable for resharpening. The unit is light, compact, and sturdy — does not tire hands.

Price, No. **45-021** Wire Stripper.....each **$2.50**

HOT BLADE WIRE STRIPPER

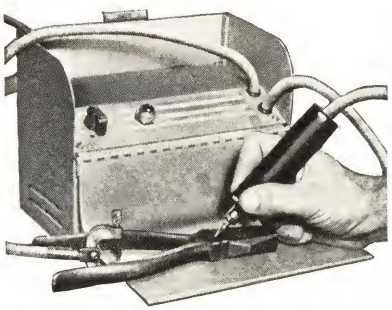


For production stripping. Strips cotton, silk, synthetic (plastic) insulation or rubber coverings from fine, stranded or solid conductors that does not exceed ⅜ inch. Easy to operate — simply place wire between the blades, depress the foot pedal, give a slight twist to the right or left. A slight pull removes the insulation — leaving an even edge.

Simple adjustments are provided for stripping lengths, diameter of wire, and blade heat. Stripping length is adjustable from ¼ to 1½ inches. A "Hi-Lo" switch mounted between the individual blade controls makes possible the adjustment of heat for heavy, average and light insulation. Compact, self-contained, easily installed, modern in appearance. Except for foot pedal, all parts (stripping head, water pan and exhaust) are in a single unit. (Note: This stripper is not suited for stripping asbestos, metallic, or other weather-proof covering.)

Price, No. **45-073** Wire Stripper.....each **$550.00**

IDEAL ELECTRIC ETCHERS

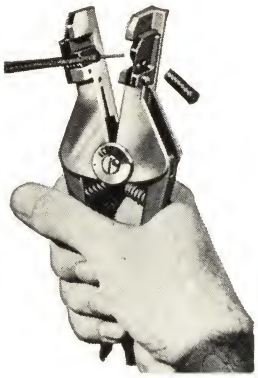


Used like a pencil. Burns right into smooth surfaced iron, steel and their alloys, leaving a permanent mark. Depth of mark is governed by speed of movement and by heat switch.

For marking tools, parts, materials. Prevents theft, confusion, delays — avoids mistakes.

Cat. No.	Description	Price Each
11-009	Standard 115 Volt, 50-60 Cy.	**$65.40**
11-048	Machine Shop 115 Volt, 50-60 Cy.	**163.40**
11-081	Universal 115 Volt, 50-60 Cy.	**107.70**

IDEAL STRIPMASTER WIRE STRIPPER



The only hand type Wire Stripper with automatic single-squeeze operation. Exclusive automatic feature holds jaws open after stripping to permit removal of wire and prevent crushing. A single squeeze of the handles strips wire clean and bare up to a full ⅞ inch. There is no nicking or fraying of wire. Blades are specially hardened for long service and can be changed with the removal of only two screws.

Strips any of the following wire: Building, fixture or telephone wire — lamp, portable equipment and appliance cords. Automotive wiring, radio, instrument wire and cable — switchboard and aviation wire, also FM and TV down lead wire.

Cat. No.	Wire Gauge	Price Each	Extra Blade No.	Price Per Pair
***45-090**	8 to 12	**$10.50**	L-4419	**$2.20**
45-091	10 to 18	**10.50**	L-4420	**2.20**
***45-092**	10 to 22	**10.50**	L-4422	**2.20**
45-093	14 to 22	**10.50**	L-4422	**2.20**

*Strip only. No cutting edge.

Replacement blades available.

IDEAL AUTOMATIC E-Z WIRE STRIPPER



For stripping standard lamp and fixture wire, automotive wire and all other stranded wire. Provided with a lever to stop the return of the arms until the wire is removed after stripping. This prevents crushing of stranded wire by returning stripper arm. Also suitable for stripping solid wires.

E-Z Standard Model—Same as "E-Z" Automatic model, except that it does not have a lever to stop return of arms after stripping. Especially designed for stripping solid wire, it may also be used on stranded wire.

Cat. No. Automatic Model	Cat. No. Standard Model	Wire Gauge No.	No. of Holes	Extra Blade Nos.
45-029	**45-024**	Nos. 20 to 30	6	L-2756
45-030	**45-025**	Nos. 12 to 18	3	L-2587
45-031	**45-026**	Nos. 10 to 16	3	L-2588
45-032	**45-027**	Nos. 8 to 14	2	L-2757
45-046	**45-045**	Nos. 16 to 22	4	L-2586
***45-078**	.....	Nos. 10 to 22	6	L-3705

*No cutting edge.

Automatic Models .....each **$10.50**
Standard Models .....each **8.80**
All Replacement Blades.....each **2.20**

IDEAL BX ARMOR CUTTER



Cuts BX Armor in one operation. Jaws are formed to take BX cable of any make, 2- or 3-wire, No. 10 or No. 14. No adjustments are necessary. Cuts quickly and cleanly without injury to wire insulation.

Handy pocket size. Hardened steel cutting blade is removable for sharpening. Blade is also replaceable. Weight, only 12 ounces.

Price, No. **45-079** BX Armor Cutter.....each **$7.20**

IDEAL CABLE RIPPER AND WIRE GAUGE

This ripper cuts cleanly, easily and quickly. Just the tool for use on nonmetallic sheathed duplex cable or lead-covered cable. The case-hardened cutting point gives long service.

Can also be used for ripping outer sheathing of other cords, lead cables, etc., where outside diameter is ⅝ in. or smaller.



Price, No. **45-018**.....each **$0.86**

IDEAL WIRE-PULLING LUBRICANT



Makes wire pulling easier and saves time. Protects insulation against breaks and strains. Can be used on rubber, lead or plastic covered wire. The lubricant can be applied by hand or brush. Wire or cable actually "rides" on a film of lubricant.

Cat. No.	Description	Price Each
31–086	Lubricant, Gallon size	$4.40
31–087	Lubricant, Quart size	1.76

WE ALWAYS WELCOME

YOUR INQUIRIES REGARDING

OUR PRODUCTS — OUR

RESPONSE IS PROMPT

IDEAL FISH TAPES

Highest grade tempered spring steel is used. No curling. Flexible and easy to use on long runs of conduit having several bends.

Cat. No.	Length and Size of Tape	Price Each
31-004	50 ft.....⅛ x .060 (1/16")	$2.60
31-036	100 ft.....⅛ x .060 (1/16")	5.00
31-038	200 ft.....⅛ x .060 (1/16")	9.90
31-050	100 ft.....¼ x .060 (1/16")	8.00
31-052	200 ft.....¼ x .060 (1/16")	16.00
31-078	50 ft.....⅛ x .045 (3/64")	2.30
31-079	100 ft.....⅛ x .045 (3/64")	4.30
31-082	Fish Tape Leader.....	4.70
31-083	Fish Tape Ball	1.30

IDEAL FISH TAPE REELS AND PULLERS



Standard Size **Junior Size**

Invaluable for building construction and industrial work. Reel serves as handle to give firm grip in pulling on fish tape.

Saves 50 per cent of the workman's time. Keeps tape fully protected, coiled ready to use.

Nine stock sizes of complete Fish Tape, Reels, and Pullers.

Cat. No.	Length and Size of Tape	Price Each
31-007	50 ft.....⅛ x .045 (3/64")	$5.10
31-008	50 ft.....⅛ x .060 (1/16")	7.50
31-009	100 ft.....⅛ x .060 (1/16")	12.80
31-011	100 ft.....¼ x .060 (1/16")	15.40
31-016	200 ft.....⅛ x .060 (3/64")	18.90

IDEAL COIL-FLEX FISH TAPE



For all types of conduit — including aluminum. The Ideal Coil-Flex is extremely flexible; can be pushed or pulled with little effort through any and all bends allowed by the electrical code. Its round surface slides through any type of conduit far more easily than flat tape. Positively prevents cutting or damaging of aluminum. Ends are smooth and round to avoid catching or snagging.

The Coil-Flex consists of a 25-ft. length of steel spring 11/32 inch in diameter with a rustproof inner steel cable. A male fitting on one end and a female fitting on the other makes it easy to join together two or more lengths for jobs requiring a longer tape. Easy on the hands, it gives a safe, positive grip. Every Coil-Flex is factory inspected and tested at 400 pounds pull.

Price, No. **31-081** 25-ft. length.....each **$15.30**

KELLEMS PULLING GRIPS

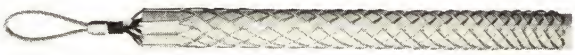
SWIVEL EYE PULLING GRIPS



Forged steel swivel eye, swaged to the strands of the Grip; varied mesh, tubular protection and endless weave (no pigtails). Made of improved plow steel strand.

For Cable Diam., In.	Medium Mesh 20"-32" Cat. No.	Price Each	Standard Mesh 32"-44" Cat. No.	Price Each	Long Mesh 44"-60" Cat. No.	Price Each
¾ to 1	K075-M	$ 5.20	K075-P	$ 6.40	.....	.....
1 to 1¼	K100-M	5.70	K100-P	7.10	K100-L	$ 8.60
1¼ to 1½	K125-M	6.20	K100-P	7.10	K100-L	8.60
1½ to 2	K150-M	6.70	K150-P	7.80	K150-L	9.20
2 to 2½	K200-M	7.50	K200-P	8.80	K200-L	10.00
2½ to 3	K250-M	8.30	K250-P	9.80	K250-L	11.00
3 to 3½	K300-M	9.10	K300-P	10.90	K300-P	12.20
3½ to 4	K350-M	9.90	K350-P	12.00	K350-P	15.00
4 to 4½	.....	.....	K400-P	13.30	K400-P	16.50
4½ to 5	.....	.....	.....	.....	K450-P	18.50

UNIVERSAL PULLING GRIPS



This is a quality single weave Pulling Grip of latest design. Swaged aluminum collar; tubular protection; varied mesh, and endless weave.

For Cable Diam., In.	Short Mesh 12"-20" Cat. No.	Price Each	Medium Mesh 20"-32" Cat. No.	Price Each	Standard Mesh 32"-42" Cat. No.	Price Each
¾ to 1	U075-A	$ 2.40	U075-M	$ 2.90	U075-P	$ 4.20
1 to 1¼	U100-A	2.60	U100-M	3.20	U100-P	4.50
1¼ to 1½	U125-A	2.90	U125-M	3.50	U100-P	4.50
1½ to 1¾	U150-A	3.20	U150-M	3.90	U150-P	4.80
1¾ to 2	U175-A	3.60	U150-M	3.90	U150-P	4.80
2 to 2½	U200-A	3.90	U200-M	4.40	U200-P	5.30
2½ to 3	U250-A	4.20	U250-M	4.90	U250-P	5.70
3 to 3½	.....	.....	U300-M	5.40	U300-P	6.20
3½ to 4	.....	.....	.....	.....	U350-P	6.60

OLD TYPE PULLING GRIPS



Flexible served eye, tubular protection. Plow steel strand.

Double Weave Only

For Cable Diam., In.	24" Long Cat. No.	Price Each	36" Long Cat. No.	Price Each	48" Long Cat. No.	Price Each
¾ to 1	T075-24	$ 3.60	T075-36	$ 4.90	T075-48	$ 6.00
1 to 1½	T100-24	3.90	T100-36	5.20	T100-48	6.30
1½ to 2	T150-24	4.30	T150-36	5.60	T150-48	6.60
2 to 2½	T200-24	4.60	T200-36	5.90	T200-48	7.00
2½ to 3	T250-24	4.90	T250-36	6.20	T250-48	7.40
3 to 3½	T300-24	5.40	T300-36	6.70	T300-48	7.80
3½ to 4	T350-24	5.90	T350-36	7.20	T350-48	8.20

KELLEMS PULLING GRIPS

KELLEMS SLACK GRIPS



For pulling slack and removing cable — a vast improvement over the Old Type Grip with "Offset Eye." Has new triple weave, varied mesh and endless weave.

For Cable Diam., In.	Closed Grip with Ring & Sling Cat. No.	Price Each	Split Grip Double Weave with Lacing Split Ring & Sling Cat. No.	Price Each
¾ to 1	KW075-A	$ 6.00	KS075-A	$ 6.30
1 to 1¼	KW100-A	6.30	KS100-A	6.70
1¼ to 1½	KW125-A	6.60	KS125-A	7.10
1½ to 1¾	KW150-A	6.90	KS150-A	7.70
1¾ to 2	KW175-A	8.40	KS175-A	9.20
2 to 2½	KW200-A	9.00	KS200-A	9.60
2½ to 3	KW250-A	9.50	KS250-A	10.00
3 to 3½	KW300-A	11.10	KS300-A	11.60
3½ to 4	KW350-A	11.60	KS350-A	12.10

In addition to the Grip, order one Yoke for each rig: No. KY-4, **$3.00** each.

UNIVERSAL SLACK GRIPS



A new design with single offset eye, swaged aluminum collar, varied mesh and endless weave.

For Cable Diam., In.	Closed Grip Double Weave Cat. No.	Price Each	Split Grip Double Weave With Lacing Cat. No.	Price Each
¾ to 1	UD075-A	$ 3.40	US075-A	$ 4.00
1 to 1¼	UD100-A	3.70	US100-A	4.30
1¼ to 1½	UD125-A	4.00	US125-A	4.60
1½ to 1¾	UD150-A	4.30	US150-A	4.90
1¾ to 2	UD175-A	4.80	US175-A	5.40
2 to 2½	UD200-A	5.50	US200-A	6.20
2½ to 3	UD250-A	6.20	US250-A	7.00
3 to 3½	UD300-A	6.90	US300-A	7.80
3½ to 4	UD350-A	7.60	US350-A	8.60

For Cable Diam., In.	Closed Grip Single Weave Cat. No.	Price Each	Split Grip Single Weave Rod Closing Cat. No.	Price Each
¾ to 1	UC075-A	$ 2.60	UB075-A	$ 3.00
1 to 1¼	UC100-A	2.90	UB100-A	3.20
1¼ to 1½	UC125-A	3.10	UB125-A	3.40
1½ to 1¾	UC150-A	3.30	UB150-A	3.60
1¾ to 2	UC175-A	3.60	UB175-A	4.00
2 to 2½	UC200-A	3.90	UB200-A	4.40
2½ to 3	UC250-A	4.20	UB250-A	4.70
3 to 3½	UC300-A	4.60	UB300-A	5.10
3½ to 4	UC350-A	4.90	UB350-A	5.50

JUNIOR PULLING GRIP



For pulling multiple insulated wire through conduit.

Diam., Range, In.	Cat. No.	For Wire Sizes	Price Each
¼ to ⅜	J25	2 No. 14 or Equivalent....	$1.00
⅜ to ½	J37	2 to 6 No. 12 or Equiv.....	1.25
½ to ⅝	J50	2 to 6 No. 10 or Equiv.....	1.50
⅝ to ¾	J62	3 to 6 No. 8 or Equiv.....	1.75
¾ to 1	J75	3 to 6 No. 6 or Equiv.....	2.00
1 to 1¼	J100	2 to 4 No. 1/0 or Equiv...	2.25

KLEIN TOOLS

NO. 201 SIDE CUTTING PLIER



Handles temper blued, polished head and jaws, scored jaws.

Cat. No.	Lgth. In.	Wt. Lbs. Per Doz.	Price Each	Cat. No.	Lgth. In.	Wt. Lbs. Per Doz.	Price Each
201-5	5	3	$6.50	201-8	8	11¾	$9.00
201-6	6	5¼	7.00	201-9	9	14	9.50
201-7	7	7¼	7.50				

NO. 212 SIDE CUTTING PLIER

Same as No. 201 with addition of sleeve joint twister.



Cat. No.	Lgth. In.	Sleeve B&S Ga. Open.	Wt. Lbs. Per Doz.	Price Each	Cat. No.	Lgth. In.	Sleeve B&S Ga. Open.	Wt. Lbs. Per Doz.	Price Each
212-6	6	14	5¼	$7.50	212-8	8	10	11¾	$9.50
212-7	7	14	7¼	8.50					

NO. 201-N.E. SIDE CUTTING PLIER



Identical with series No. 201 except that the nose is rounded to permit easier working in confined space and all edges rounded to prevent nicking of wire. Polished head and temper-blued handles.

Cat. No.	Size In.	Wt. Lbs. Per Doz.	Price Each	Cat. No.	Size In.	Wt. Lbs. Per Doz.	Price Each
201-6-NE	6	5¼	$7.00	201-8-NE	8	11¼	$9.00
201-7-NE	7	7¼	7.50	201-9-NE	9	13½	9.50

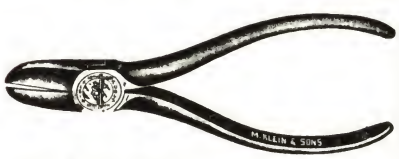
NO. 212-N.E. SIDE CUTTING PLIER

Identical with series 201-N.E. but has opening provided for twisting double tube sleeve joints. Sleeve opening in 6- and 7-inch pliers for Nos. 14 and 17 N.B.S. and No. 12 B. & S. (.045). Sleeve opening in 8-inch pliers for No. 12 N.B.S. and No. 10 B. & S. (.104).



Cat. No.	Size In.	Wt. Lbs. Per Doz.	Price Each	Cat. No.	Size In.	Wt. Lbs. Per Doz.	Price Each
212-6-NE	6	5¼	$7.50	212-8-NE	8	11¾	$9.50
212-7-NE	7	7¼	8.50				

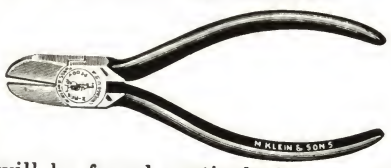
NO. 202 OBLIQUE CUTTING PLIER



For close cutting in confined places, will cut silk insulation cleanly. Polished head and blued handle. Lap joint.

Cat. No.	Lgth. In.	Wt. Lbs. Per Doz.	Price Each	Cat. No.	Lgth. In.	Wt. Lbs. Per Doz.	Price Each
202-5	5	3¾	$5.70	202-6	6	4	$5.80

NO. 245 OBLIQUE CUTTING PLIER



This plier measures exactly 5 inches in length. It is slightly smaller in all dimensions than the 202-5 and will be found particularly convenient as it can easily be carried in vest pocket.

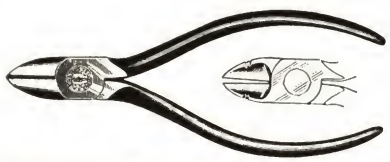
Weight per dozen, 3 pounds.

Price, No. **245-5**, size 5-inch.....each **$5.70**

All Pliers, Polished Heads and Temper-Blued Handles. Standard Package 6 in a box.

KLEIN TOOLS

NO. 245-W OBLIQUE CUTTING PLIER

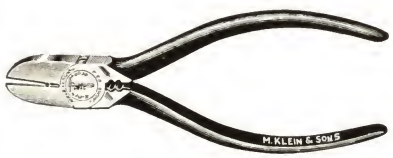


This tool has two "W" shaped notches at back of knives. Designed for removing acetate cellulose insulation from .050 and .058 wires used on telephone distributing frames, etc. Wt. per doz. 3 lb.

Price, No. **245-W**, size 5-inch.....each **$6.50**

NO. 240-S OBLIQUE CUTTING PLIER

Same as 202 series but with addition of stripping notch and openings for twisting sleeves. Wt. per dozen, 3¾ pounds.



Price, No. **240-S**, size 5-inch.....each **$6.50**

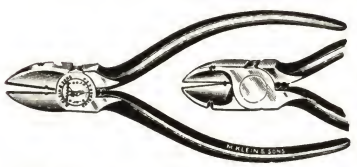
NO. 240 OBLIQUE-CUTTING PLIER



Identical with No. 202 series with the addition of a notch in cutting knives.

Cat. No.	Size In.	Wt. Lbs. Per Doz.	Price Each	Cat. No.	Size In.	Wt. Lbs. Per Doz.	Price Each
240-5	5	3¾	$6.00	240-6	6	4	$6.10

NO. 202-SW OBLIQUE CUTTING PLIER



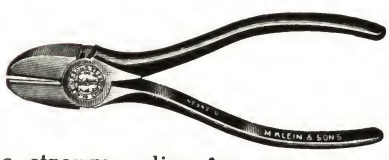
This plier is the all - purpose cutting tool for telephone installation and maintenance work. The "W" notches will slit acetate cellulose and other insulation from wires up to .058 O.D. A stripping hole .052 diameter is provided in blades. Sleeve openings in handle.

Weight per dozen, 3¾ pounds.

Price, No. **202-5-SW**, size 5½-inch.....each **$7.00**

NO. 242 OBLIQUE CUTTING PLIER

Heavy Pattern



Similar in construction to No. 202. It is made heavier to meet the requirements of those desiring a stronger plier for general work. Weight per dozen, 4¼ pounds.

Price, No. **242-6**, size 6-inch.....each **$6.20**

All Pliers, Polished Heads and Temper-Blued Handles. Standard Package 6 in a box.

KLEIN TOOLS

NO. 220 "AUTO" OBLIQUE-CUTTING PLIER



Made especially for automotive mechanics and others who demand a high quality plier of this pattern. Knives are close cutting and carefully matched for their full length. The "Handform" handles provide full leverage and comfort for continual use. Weight per doz., 7 pounds.

Price, No. **220-7**, size 7-inch.....each **$6.50**

NO. 301 LONG NOSE PLIER

Without Cutters



Perfected to meet a long-felt want of electrician and general mechanic. For switchboard, telegraph and telephone work, armature winding, etc.

Cat. No.	Size In.	Wt. Lbs. Per Doz.	Price Each	Cat. No.	Size In.	Wt. Lbs. Per Doz.	Price Each
301-5	5	3¼	**$4.90**	**301-7**	7	4¼	**$5.50**
301-6	6	3¾	**5.00**	.....	..	.....	.....

NO. 203 LONG NOSE PLIER

Side Cutting

Same as No. 301 series with addition of cutting knives.



Cat. No.	Size In.	Wt. Lbs. Per Doz.	Price Each	Cat. No.	Size In.	Wt. Lbs. Per Doz.	Price Each
203-5	5	3¼	**$5.50**	**203-7**	7	4¼	**$6.30**
203-6	6	3¾	**6.00**	.....	..	.....	.....

NO. 303-6 LONG NEEDLE NOSE PLIER



Has all the features of No. 301 series, except that the points of the nose are of the needle point pattern. Polished head and temper-blued handles. Standard package 6. Weight per dozen, 3¾ pounds.

Price, No. **303-6**, size 6-inch.....each **$5.00**

NO. 317 CHAIN NOSE PLIER

Without Cutters



This plier is intended for general use where a shorter nose is desirable. One size only.

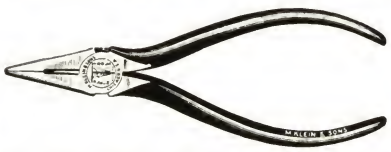
Weight per dozen, 3½ pounds.

Price, No. **317-6**, size 6-inch.....each **$5.00**

All Pliers, Polished Heads and Temper-Blued Handles. Standard Package 6 in a box.

KLEIN TOOLS

NO. 217 CHAIN NOSE PLIER, SIDE CUTTING



Similar to No. 317-6 but with side cutting knives. The knives are carefully matched and cut true over their entire length. Made in one size only. Weight per dozen, 3½ pounds.

Price, No. **217-6**, size 6-inch.....each **$6.00**

NO. 313 HEAT-COIL PLIER



Particularly adapted for the removing of heat coils from switchboards and telephone terminals, the points of the nose being shaped to fit the coils. This tool is also serviceable in removing caps from batteries or from binding posts, as well as holding any cylindrical object.

Weight per dozen, 3¾ pounds.

Price, No. **313-6**, size 6-inch.....each **$5.20**

NO. 305 LONG FLAT NOSE PLIER



Adaptable to switchboard work, telegraph work, armature winding, etc. A very handy tool for spring adjusting.

Polished head and temper-blued handles.

Weight per dozen, 3½ pounds.

Price, No. **305-6**, size 6-inch.....each **$5.00**

NO. 206 LONG FLAT NOSE PLIER

Side Cutting



Useful plier for working in deep and narrow places. Lap joint, scored jaws.

Polished head and handles temper blued.

Weight per dozen, 3½ pounds.

Price, No. **206-6**, size 6-inch.....each **$6.00**

NO. 311-5½ LONG FLAT-NOSE SPRING-ADJUSTING PLIER



This plier is hollow ground on the outside of the jaws to reach between and grasp springs easily. Largely used by telephone men because it makes rapid and accurate adjustments possible.

Weight per dozen, 3¼ pounds.

Price, No. **311-5½**, size 5½-inch.....each **$5.50**

All Pliers, Polished Heads and Temper-Blued Handles. Standard Package 6 in a box.

KLEIN TOOLS

NO. 304-6 LONG DUCK-BILL PLIER



Intended for general use; the duck-bill jaws are wider and heavier than those of the ordinary flat nose plier. Polished head and blued handle. Lap joint, scored jaws.

Weight per dozen, 3½ pounds.

Price, No. **304-6**, size 6-inch.....each **$5.50**

NO. 205-6 LONG DUCK-BILL PLIER

Fitted with cutting knives which cut easily and true.



Polished head and temper-blued handles.

Weight per dozen, 3¼ pounds.

Price, No. **205-6**, size 6-inch.....each **$6.50**

NO. 302-6 LONG NOSE CURVED PLIER



A handy plier for working around switchboards; the nose being bent at an angle of 45 degrees. Lap joint; scored jaws. Polished head and handles temper blued.

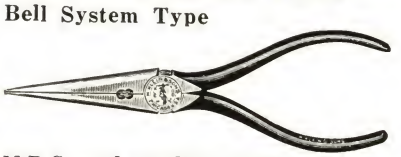
Weight per dozen, 3¼ pounds.

Price, No. **302-6**, size 6-inch.....each **$6.50**

NO. 316-S LONG NOSE SLEEVE PLIER

Bell System Type

Identical with the No. 301-6 but with addition of sleeve openings for twisting No. 17 N.B.S. and smaller copper sleeves.



Price, No. **316-S**, size 6-inch.....each **$6.00**

NO. 301-C LONG-NOSE CORD-CRIMPING PLIER

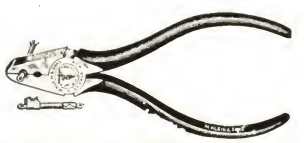


Same as No. 301-6 with addition of oval groove for crimping telephone cords.

Price, No. **301-C**, size 6-inch.....each **$5.70**

NO. 039 CORD-TIP-CLOSING PLIER

The jaws of this tool are of sturdy design to permit its use as a hand press for closing cord tips such as W.E. 101 and 102. The circular opening in the jaws is correctly sized to ensure a perfect connection when the closure is completed. Weight per doz. 3 pounds.



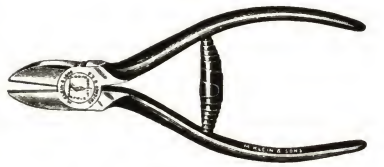
Price, No. **039**, size 5-inch.....each **$7.00**

All Pliers, Polished Heads and Handles Temper Blued. Standard Package 6 in a box.

KLEIN TOOLS

NO. 202-5-V OBLIQUE CUTTING PLIER

(Volute Spring—Narrow Head)



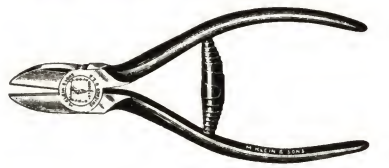
This is the regular No. 202-5 plier but fitted with volute spring for bench work.

Price, No. **202-5V**, size 5½-inch.....each **$8.00**

NO. 245-5-V OBLIQUE CUTTING PLIER

(Volute Spring)

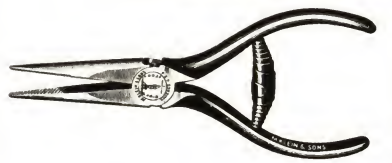
This is the regular 245-5 plier, but fitted with volute spring for cutting in general bench production work.



Price, No. **245-5-V**, size 5-inch.....each **$8.00**

NO. 301-5-V LONG NOSE PLIER

(Volute Spring—Without Cutting Knives)



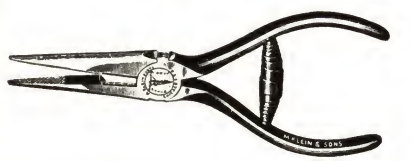
For bench work where a plain long nose plier is required. The spring keeps plier open at position ready for use.

Price, No. **301-5-V**, size 5-inch.....each **$8.00**

NO. 203-5-V LONG NOSE CUTTING PLIER

(Volute Spring)

A convenient tool for production work where a combination of long jaws with cutting knives is required.



Price, No. **203-5-V**, size 5-inch.....each **$8.50**

All Pliers, Polished Heads and Handles Temper Blued. Standard Package 6 in a box.

NO. 102-1 SPLICING CLAMP



Has five round holes accommodating iron wire Nos. 10 to 18 B. W. G. and copper wire Nos. 8 to 16 B. & S. gage. Polished head; black handles. Standard package 6. Weight per dozen, 5¾ pounds.

Price, No. **102-1**, size 8-inch.....each **$6.00**

NO. 102-3 SPLICING CLAMP

Has five round holes and one oval hole accommodating all



sizes of iron wires from Nos. 4 to 14 B. W. G. and all sizes of copper wire from Nos. 2 to 12 B. & S. gage. Polished head; black handles. Standard package 6. Weight per dozen, 16¾ pounds.

Price, No. **102-3**, size 10¾-inch.....each **$8.50**

KLEIN TOOLS

NO. 102-30 SPLICING CLAMP



In the 102-3 splicing clamp the large hole is at the hinge. In the 102-30 the holes have been reversed, to meet the requirements of those preferring this arrangement. Accommodates all sizes of iron wire 5 to 14 B.W.G. and all sizes copper wire from Nos. 2 to 12 B. & S. gage. Polished head and black handles. Standard package 6. Weight per dozen, 16¾ pounds.

Price, No. **102-30**, size 10¾-inch.....each **$8.50**

NO. 102-48 SPLICING CLAMP



Designed to meet the general range of wire sizes used by electric light and power companies. Has five openings for twisting bare copper wire, Nos. 0 to 8 B. & S. gage. Standard package 6. Weight per dozen, 16¼ pounds.

Price, No. **102-48**, size 10¾-inch.....each **$8.50**

NO. 105-15 SPLICING CLAMP



Has four holes for twisting double tube sleeves. Copper sleeves Nos. 8, 10, 12, 14, 17 B. & S.; iron sleeves Nos. 10, 12, 14, 16, and 19 B. W. G. Polished head and black handles. Standard package 6. Weight per dozen, 5¾ pounds.

Price, No. **105-15**, size 8-inch.....each **$6.50**

NO. 105-17 SPLICING CLAMP



Has five sleeve holes for twisting double tube sleeves. Copper sleeves Nos. 6, 8, 10, 12 and 14 B. & S. iron sleeves Nos. 8, 10, 12, 14, 16, 19 B. W. G. Polished head; black handles. Standard package 6. Weight per dozen, 17 pounds.

Price, No. **105-17**, size 10¾-inch.....each **$8.00**

KLEIN TOOLS

NO. 132-15 COMBINATION WIRE AND SLEEVE CLAMP



Has five round holes and will accommodate all sizes of iron wire Nos. 6 to 14 B. W. G. and all sizes of copper wire Nos. 4 to 12 B. & S. gage. One large oval hole for guy strand .437x.624. The reverse side has five sets of chambers adapted for twisting double tube copper sleeve joints Nos. 6 to 17 B. & S. gage and iron sleeve joints Nos. 8 to 19 B. W. G. Polished head and black handles. Standard package 6. Weight per dozen 18 pounds.

Price, No. **132-15**, size 11¼-inch.....each **$10.50**

NO. 132-46 COMBINATION WIRE AND SLEEVE CLAMP



Has five round holes for twisting iron wire Nos. 6 to 14 B.W.G. and copper wire Nos. 4 to 12 B. & S. One oval hole for guy strand .437 by .624. Reverse side has five double chambers for twisting copper sleeves, Nos. 4 to 12 B. & S., and iron sleeves, Nos. 6 to 14 B.W.G.

Polished head and black handles. Standard package 6. Weight per dozen, 17¾ pounds.

Price, No. **132-46**, size 11¼-inch.....each **$10.50**

NO. 132-12 SPLICING CLAMP



Has four round holes accommodating all sizes of copper wire from 6 to 12 B. & S. gage and all sizes of iron wire Nos. 8 to 14 B.W.G. The reverse side has four sets of chambers adapted for twisting double tube copper sleeve joints Nos. 8, 10, 12, 14, 17 B. & S. gage and iron sleeve joints Nos. 10, 12, 14, 16, 19, B.W.G. Polished head and black handles. Standard package 6. Weight per dozen, 11 pounds.

Price, No. **132-12**, size 9-inch.....each **$7.70**

NO. 132-30 COMBINATION WIRE AND SLEEVE CLAMP



The sleeve openings are for N.B.S. and B.W.G. sizes 9 and 8 respectively. The remaining five openings cover the range of wire generally used on railroad signal and telegraph construction. Standard package, 6. Weight per dozen, 18 pounds.

Price, No. **132-30**, size 11¼-inch.....each **$10.50**

KLEIN TOOLS

NO. 132-48 COPPERWELD SLEEVE CLAMP



This clamp has four chambers for twisting single tube (oval) sleeves used for making joints on Copperweld conductors 4A, 6A, 8A and 3 No. 12. These chambers also accommodate single tube (oval) sleeves as follows:

4A	Copperweld or No. 1 solid B&S or No. 2 strand B&S Copper
6A	Copperweld or No. 3 solid B&S or No. 4 strand B&S Copper
8A	Copperweld or No. 4 solid B&S or No. 5 strand B&S Copper
3 No. 12	Copperweld or No. 5 solid B&S or No. 6 strand B&S Copper

The swing latch provided holds the head securely closed while joint is being twisted, preventing any slippage or "burning" which might develop otherwise from bowing of handles when twisting the larger sleeves.

Price, No. **132-48**, size 11½-inch.....each **$11.00**

NO. 132-39 STRAND AND WIRE HOLDING TOOL



This tool serves as a temporary clamp to hold together two sections of strand or wire while placing permanent clamps or splicing and serving. Standard package, 6. Weight per dozen, 18 pounds.

Price, No. **132-39**, size 11¼-inch.....each **$10.50**

NO. 132-47 WIRE AND SLEEVE CLAMP



Has five special chambers for twisting single tube or oval sleeves, Nos. 2 to 8 and No. .104. The spring latch provided is necessary to overcome any spring in handle which might otherwise develop in a tool of this type when used on large sleeves. Standard package 6. Weight per dozen, 18 pounds.

Price, No. **132-47**, size 11½-inch.....each **$11.00**

NO. 132-74 WIRE AND SLEEVE CLAMP

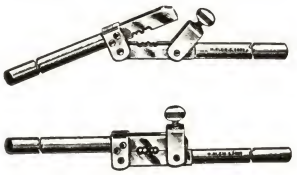


This clamp has three special chambers for twisting single tube or oval (Memco) sleeves and Nos. 2, 4 and 6. Also an oval (hog) hole .437 x .624 for guy wire. The chambers are a modified "figure 8" shape, giving a secure hold which prevents "burning" the sleeves when the joint is twisted. Standard package, 6. Weight per dozen, 16 pounds.

Price, No. **132-74**, size 11½-inch.....each **$11.00**

KLEIN TOOLS

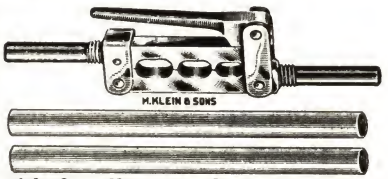
*NO. 107-20 "DI-STOCK" SLEEVE TWISTER



Recommended for use on all types and makes of sleeves from No. 4 B&S solid up to No. 3/0 B&S strand. (For larger sleeves see Di-Stock No. 107-34). Length overall, 23½ in.

Price, No. **107-20**, Sleeve Twister.....each **$24.00**

*NO. 107-34 HEAVY-DUTY TYPE



Similar to No. 107-20 but the handles are tubular and are attached to the head by means of a quick acting thread. Distance over all with handles attached, 34 inches.

Price, No. **107-34**, Sleeve Twister.....each **$42.00**

*Sample sleeves for which tools are desired must accompany order.

NO. 1939 "STREAMLINED" CLIMBERS



The use of any unnecessary metal has been carefully avoided. The leg irons are flexible and tapered in width and thickness. The critical section from 3 inches above the gaff to half way across the stirrup has been designed for ample strength.

The gaffs are slender type — preferred on treated ("black jack") poles. A wrought ring carries the ankle strap. Gaffs 3½ inches long, measured on the outside.

Stock sizes 15, 15½, 16, 16½, 17, 17½ and 18 inches, measured from instep to end of shank. Other sizes to order. Riveted top loop, ring at ankle.

Cat. No.	Description	Wt. Lbs. Per Pair	Price per Pair
1939	Riveted Top Loop, Ring at Ankle	2½	**$13.00**
1939-ADJ	Adjustable Climbers	2⅞	**17.00**

NO. 1901-M CLIMBERS

Standard Pattern



Leg iron or shank is made of spring steel, the gaff or spur is forged from tool steel. Stock sizes 15, 15½, 16, 16½, 17, 17½ and 18 inches, measured from the instep to end of shank. Other sizes to order.

Cat. No.	Description	Wt. Lbs. Per Pair	Price per Pair
1901-M	Riveted Strap Loops	3⅜	**$10.50**
1901-M-ADJ	Adjustable Climbers	3¾	**14.00**

KLEIN TOOLS

NO. 1903 LIGHTWEIGHT CLIMBERS



These climbers are similar to No. 1901-M, but are made as light as possible in the leg iron consistent with good safety practice. Stock sizes 15, 15½, 16, 16½, 17 17½, and 18 inches, measured from instep to end of shank. Other sizes to order.

Cat. No.	Description	Wt. Lbs. per Pair	Price per Pair
1903	Riveted Strap Loops	2⅞	**$11.20**
1903-ADJ	Adjustable Climbers	3⅜	**14.70**

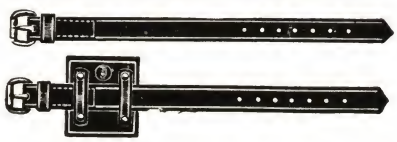
NO. 1907 TREE CLIMBERS



Furnished with extra long gaffs necessary to penetrate bark in tree climbing. Stock sizes 15, 15½, 16, 16½, 17, 17½ and 18 inches. Length spur underside, 3½ inches.

Cat. No.	Description	Wt. Lbs. per Pair	Price per Pair
1907	Riveted Strap Loops	4	**$11.20**
1907-ADJ	Adjustable Climbers	4¼	**14.70**

CLIMBER STRAPS AND PADS

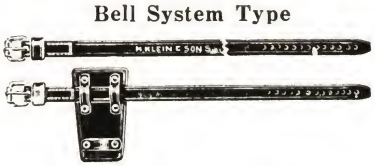


The set consists of two upper (or calf) straps, 1¼x22 inches; two lower (or ankle) straps, 1¼x22 inches; and two square pads, 4x4 inches. All leather used is first-quality harness leather. Sewing is lock-stitched with genuine linen thread, hot-waxed. Buckles are Klein standard solid steel drop forgings, tested to 1500 lbs.

Cat. No.	Description	Wt. Lbs., Per Doz. Sets	Price Per Set
5301-1	With Plain Pads	20	**$9.50**
5301-2	With Sheep Lined Pads.....	20	**10.50**
5301-3	With Felt Lined Pads.....	20	**10.50**
	Straps 1 Inch Wide		
5301-11	With Plain Pads	18	**9.00**
5301-12	With Sheep Lined Pads.....	18	**9.50**
5301-13	With Felt Lined Pads.....	18	**9.50**

CLIMBER STRAPS AND PADS

Bell System Type



Set consists of two upper or calf straps 1x22 inches with two special pads as shown and two lower or ankle straps 1x26 inches. Buckle holes in straps are spaced ½-inch centers.

Cat. No.	Description	Wt. Lbs., Per Doz. Sets	Price Per Set
5301-6	With Plain Pads	14	**$10.50**
5301-7	With Sheep Lined Pads.....	15	**11.50**
5301-8	With Felt Lined Pads.....	15	**11.50**

KLEIN TOOLS

CLIMBER STRAPS



These straps are furnished without pads.

Cat. No.	Description	Wt. Per Doz. Pairs	Price per Pair
5301- 4	One Pair, 1¼ x 22-in.....	8	**$4.00**
5301- 9	One Pair, 1 x 22-in.....	6	**3.70**
5301-14	One Pair, 1¼ x 26-in.....	9	**4.50**
5301-10	One Pair, 1 x 26-in.....	8	**4.00**

SPECIAL ANKLE STRAPS



For ring attachment on No. 1939 climbers. These special straps are made in two pieces and are furnished with rivets and burrs. Punched for quick attachment.

Cat. No.	Description	Wt. Per Doz. Pairs	Price per Pair
5301-16	One Pair, 1¼ x 24-in.....	10	**$6.00**
5301-26	One Pair, 1 x 24-in.....	8½	**5.50**

PADS FOR CLIMBERS



These pads are made of select leather, arranged with loops through which to slip climber straps.

Cat. No.	Description	Size Inches	Wt. Lbs. Doz. Sets	Price per Pair
8200	Sheep-lined	4 x 4	4	**$2.50**
8201	Felt-lined	4 x 4	4	**2.50**
8202	Plain Leather	4 x 4	4	**1.80**
	Bell System Type			
8203	Plain-Leather	3¾ to 2¾x6¼	6	**3.00**
8204	Sheep-lined	3¾ to 2¾x6¼	6	**4.00**
8205	Felt-lined	3¾ to 2¾x6¼	6	**4.00**

PEAR-SHAPED CLIMBER PADS

These pads are made of two thicknesses of select harness leather riveted together. The outer is punched with two slots for climber strap and one cross slot through which the leg iron of climber is passed.



Cat. No.	Description	Wt. Per Doz. Pairs	Price per Pair
8206	One Pair (2 pcs.) 3½x6-in.	4½	**$2.00**

CLIMBER GAFF GUARDS



Made of harness leather. The "wings" of the guard fit around leg iron of climber just above the gaff and snap on. Gaff is covered and protected by the leather "fold over" and fibre stop as illustrated.

Weight per dozen pairs, 1¾ pounds.

Cat. No.	Description	Price
1901-MG	1 Pair (2 pcs.)	**$1.50**

KLEIN TOOLS

LEATHER TOOL BELTS—NO. 5228



No. 5228
Made in sizes 36, 38, 40, 42, 44 and 46 inches. Other sizes to order.

The cushion—4½ inches wide at center of back and tapered to 3½ inches wide at the front — is made of one piece of soft, pliable, yet tough, russet latigo leather, doubled to form comfortable rolled edges and returned at each end.

Fitted with knife snap, tape thong and glove pouch ring. Width 4½ inches.

Cat. No.	Description	Width In.	Wt.Lbs. Per Doz.	Price Each
5228	Standard D Rings	4½	45	**$27.50**

NO. 5204-DE TOOL BELTS



No. 5204-DE
Made in sizes 36, 38, 40, 42, 44 and 46 inches. Other sizes to order.

First-quality and select harness leather throughout. The cushion, 3½ inches wide, carries the "dee" rings. Outer strap or tool loop is 1½ inches wide, formed into loops by riveting the cushion. A leather pocket is provided for pliers, also a convenient snap for carrying knife. At the other end of the belt a rawhide thong is attached with fibre cross-bar for carrying tape. All rivets are solid copper, hand set with burrs. Sewing is with linen thread, hot waxed and lock stitched. "Dee" rings and buckle galvanized finish.

Cat. No.	Description	Width In.	Wt.Lbs. Per Doz.	Price Each
5204DE	Standard D Rings	3½	38	**$18.70**

KLEIN TOOLS

NO. 5204-TSO TEXAS BELT



This type of belt is made to give geater safety with utmost comfort to the wearer. The main belt is cut from a single piece of finest harness leather. It is 4 inches wide at center of back to give full support when reclining and tapered to 2¼ inches wide at the hips to allow for bending of body. Lined throughout with soft latigo leather.

Made in lengths of 36, 38, 40, 42, 44 and 46 inches. Specify length required measuring from end of buckle to middle hole at other end of belt.

Cat. No.	Description	Width In.	Wt.Lbs. Per Doz.	Price Each
5204-TSO	Standard D Rings	4	36	**$26.50**

NO. 5204 TOOL BELTS



Made of select first quality harness leather. Cushion carries D rings. Outer or loop layer is 1½ inches wide formed into tool loops by riveting to the cushion. It also passes through D rings and is furnished with a strong drop-forged buckle.

Surfaces taking wear of D rings are protected with copper safety liners riveted through full thickness of belt. All rivets are solid copper set with burrs and sewing is with hot waxed harness thread, lock-stitched.

Made in lengths 36, 38, 42, 44 and 46 inches. Specify length required measuring from end of buckle to middle hole at other end of belt.

Cat. No.	Description	Width In.	Wt.Lbs. Per Doz.	Price Each
5204	Standard D Rings	3½	34	**$15.70**

NO. 5205-5211 TOOL BELTS



Made of select first quality harness leather. Cushion carries D rings and is lock-stitched and riveted to outer layer which also passes through the D rings and has a strong drop-forged buckle. D rings are solid steel drop forgings tested to 1500 pounds and of improved design. All rivets are solid copper set with burrs and sewing is hot waxed harness thread.

Made in lengths of 36, 38, 40, 42, 44 and 46 inches. Specify length required measuring from end of buckle to middle hole at other end of belt. No. 5205 has 2¼-inch cushion. No. 5211 has 3-inch cushion narrowed at each end to carry D rings.

Cat. No.	Description	Width In.	Wt.Lbs. Per Doz.	Price Each
5205	Standard D Rings	2¼	35	**$17.00**
5211	Standard D Rings	3	34	**17.50**

KLEIN TOOLS

NO. 5202 TOOL BELT



Made of first quality harness leather. The cushion 2¼ inches wide carries the D rings. The outer or loop layer is formed into tool loops by riveting to the cushion. It also passes through the D rings and is furnished with a strong drop-forged buckle tested to 1500 pounds. Dee rings are solid steel drop forgings tested to 1500 pounds. Surfaces taking the wear of D rings are protected with copper safety liners riveted through full thickness of belt. All rivets are solid copper set with burrs, and sewing is with hot waxed harness thread, lock stitched. D rings and buckle galvanized finish.

Made in lengths 36, 38, 40, 42, 44 and 46 inches.

Cat. No.	Description	Width In.	Wt.Lbs. Per Doz.	Price Each
5202	Standard D Rings	2¼	32	**$15.00**

NO. 5212 DERRICK BELT



Designed for maximum safety for use by derrickmen, structural steel workers, tree surgeons, tower erectors, etc. The main belt is of one piece, of first quality harness leather 3 inches wide at the back, tapered to 2 inches in width at the buckle. A 3-inch forged steel dee ring is set at center of back to provide means for securely anchoring the life line or rope. Adjustable for sizes 36 to 44 inches.

Cat. No.	Description	Wt. Lbs. per Doz.	Price Each
5212	3-in. Wide, 1" "D" Ring....	30	**$18.50**
5212KK	As above, constructed with Klein Kord		**24.00**

NO. 5214 STEEL WORKER'S BELT



This belt is made of first quality harness leather 2 inches wide and fitted with 3 forged dee rings for attachment of life line in most convenient position. A leather loop is provided for wrench. The main belt passes through the dee rings which are held in place by backing pieces of latigo leather stitched and riveted to the belt proper.

Distance between outer dee rings, 24 inches. Adjustable for sizes, 36 to 44 inches.

Cat. No.	Description	Wt. Lbs. per Doz.	Price Each
5214	2-in. Wide, 3 "D" Rings....	28	**$14.00**

KLEIN TOOLS

NO. 5206-1A LEATHER BELT AND SAFETY STRAP



The tool belt is same as No. 5202. The safety strap is No. 5250. Belt 2¼ inches wide. Strap 1¾ inches. All snaps, dee rings and buckles are solid steel drop forgings designed to take a load of 1500 lbs. without distortion and are galvanized finish. Strap may be adjusted to length by means of buckle, or it may be detached entirely from belt.

Genuine harness leather throughout. Hot waxed harness thread lock stitched. Belt made 36, 38, 40, 42, 44 and 46 inches long.

Cat. No.	Description	Wt. Lbs. per Doz.	Price Each
5206-1A	Leather Belt and Safety Strap	62	**$30.00**

NO. 5209 LEATHER SAFETY HARNESS



Rear View **Front View**

Designed for use where danger from gassing is present. Working in gassy manholes, gas tanks, oil tanks, and even boilers, men are frequently overcome and an emergency arises instantly. The design of the harness is such that it slings the wearer in a perpendicular position so that he can be readily hauled through an ordinary manhole opening.

A solid harness leather back plate 2¼ inches by 10 inches is stitched and riveted around the 1¼-inch adjustable belt strap. Back plate also carries a tested drop-forged dee ring to which the ¾-inch manila life-line, 25 feet in length, is permanently attached.

Cat. No.	Description	Wt. Lbs. per Doz.	Price Each
5209	Leather Safety Harness	75	**$19.50**

NO. 5234 "KLEIN-KORD" SAFETY STRAPS



Fixed length type. On properties where there is no great variation of pole sizes the uniform strength of "Klein-Kord" fabric often makes it possible to adopt a safety strap of fixed length. Size, 1¾ x 56 inches.

Cat. No.	Description	Wt. Lbs. per Doz.	Price Each
KL-5234	With "Klein-Lok" Snaps....	25½	**$13.50**
5234	With Standard Snaps.....	25½	**11.50**

KLEIN TOOLS

LEATHER SAFETY STRAPS

These straps are cut from first quality harness leather, back or center stock only. All rivets solid copper, handset with burrs. Snaps and buckles solid steel drop forgings, galvanized finish. Straps may be lengthened or shortened by adjusting buckle. Size, 1¾ inches by 5 ft. 8 inches.

Leather Wear Pad at Buckle



No. 5251

Cat. No.	Description	Wt. Lbs. per Doz.	Price Each
KL-5251	With "Klein-Lok" Snaps..	32½	$16.50
5251	With Standard Snaps.....	32½	15.00

With Stainless Clips



No. 5250

Cat. No.	Description	Wt. Lbs. per Doz.	Price Each
KL-5250	With "Klein-Lok" Snaps..	32½	$16.50
5250	With Standard Snaps.....	32½	15.00

NO. 5215 LEATHER EXTENSION STRAPS



These extension straps are worn permanently attached to one dee ring on body belt. They are brought into use when a large pole makes it necessary to extend the regular safety strap.

Cat. No.	Size In.	Description	Wt. Lbs. Per Doz.	Price Each
5215	1¾x15	With D Ring	15½	$8.00

LEATHER SAFETY STRAPS



No. 5253

These straps are cut from first quality harness leather, back or center stock only.

Cat. No.	Size In.	Description	Wt. Lbs. Per Doz.	Price Each
KL-5253	2x68	"Klein-Lok" Snaps	40	$18.50
5253	2x68	Standard Snaps	40	17.00
*5257S	2x61½	Bell System Type ..	39	17.50
*5257L	2x70	Bell System Type ..	41	18.50
KL-5258	2x66	"Klein-Lok" Snaps	40	20.50
5258	2x66	Standard Snaps	40	19.00

*With double tongue buckle.

KLEIN TOOLS

"KLEIN-KORD" SAFETY STRAPS— RED CENTER



Made of 6-ply, heavy, close-woven, long-fibre cotton, laid in rubber and vulcanized. producing a strong flexible strap to give long wear and service. Cross cords are extra strength, permitting use of tongue type buckle without risk of slitting or ripping under severe tension.

Straps are made in 3 styles as listed. Regulation length, 5 feet 8 inches; width 1¾ inches. Snaps and D rings are drop-forged and individually tested to 1500 pounds.

Cat. No.	Description	Width In.	Wt.Lbs. per Doz.	Price Each
5233	Standard Snaps	1¾	36	$15.00
KL-5233	"Klein-Lok" Snaps..	1¾	36	16.50

"KLEIN-KORD" EXTENSION STRAPS



Used in conjunction with a fixed-length Safety Strap. It provides the extra length necessary when working on large diameter poles.

Cat. No.	Size In.	Description	Wt. Lbs. Per Doz.	Price Each
KL-5236	1¾x15	with Standard D and "Klein-Lok" Snap	16½	$9.00
5236	1¾x15	with Standard D & Standard Snap	16½	7.50

BELT ACCESSORIES



No. 5130



No. 5131



No. 5132

The Tape-thong provides a convenient arrangement for carrying a roll of tape. The thong is pliable latigo leather ⅜x10 inches, and slit to form loops at both ends. One end is looped to a fibre cross bar 3½ inches long. The other end may be readily attached to the belt. The knife snap and ring are both mounted on harness leather straps and come with rivets and burrs ready for attaching to belt.

Cat. No.	Description	Wt. Lbs. per Doz.	Price Each
5130	Tape-thong with Fibre Cross Bar	½	$0.60
5131	Knife Snap with Strap & Rivets	1½	.70
5132	Ring with Strap and Rivet.....	½	.60

KLEIN TOOLS

NO. 5139 CANVAS TOOL-PACK



A sturdy, brown, canvas bag, approximately 6 x 12 inches with heavy zipper that instantly opens or closes the full length mouth. Plenty of room for pliers, drill, wrenches, etc.

Price, No. **5139** Canvas Tool-Pack.....each **$2.00**

COMBINATION TOOL POCKETS



No. 5118-K



No. 5118-S

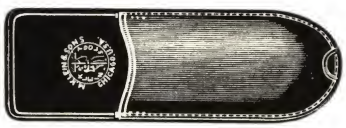


No. 5118-R

These pockets are made of heavy harness leather. Opening at bottom prevents accumulation of dirt or water. Top flap of double thickness leather for riveting to belt. (The plier compartment fits 6, 7, 8 and 9-inch side-cutting pliers.)

Cat. No.	Description	Wt. Lbs. Per Doz.	Price Each
5118-K	For Plier and Knife	7½	**$4.20**
5118-S	For Plier and Screwdriver	5½	**4.00**
5118-R	For Plier and 6-ft. Rule....	7½	**4.20**

NO. 5163 KNIFE POCKET



This harness leather pouch is made especially for No. 1560-3 skinning knife. It can be carried in hip pocket or riveted to belt. Lock stitched with genuine hot waxed linen thread. An opening at bottom prevents accumulation of water or dirt. Provides a safe method for carrying a useful knife.

Price, No. **5163** Knife Pocket.....each **$3.00**



DETACHABLE HOLSTER

Made of heavy harness leather with loop to slip over belt. Carries 6, 7, 8, or 9-inch side cutting pliers. Mouth of pocket framed to hold open position permanently.

Cat. No.	Length Inches	Wt. Lbs. Per Doz.	Price Each
5116	10	6	**$4.20**

KLEIN TOOLS

PLIER POCKETS





No. 5107 No. 5112

No. 5107 is made of good quality leather. For carrying pliers when at work. Has slits through which belt is inserted.

No. 5112 same as No. 5107 except plier does not protrude through.

Cat. No.	Size Inches	Wt. Lbs. Per Doz.	Price Each
5107	3½x8½	3	**$2.00**
5112	3½x9	4¾	**3.50**

RUBBER GLOVE POUCH

Scotch chrome leather pocket for carrying rubber gloves (folded). Comes equipped with snap and D ring ready to attach to body belt.

No. 5120-15 same as above but larger to accommodate gloves without folding.

Cat. No.	Size Inches	Wt. Lbs. Per Doz.	Price Each
5120-9	7½x9	4½	**$6.00**
5120-15	7½x15	7	**7.50**





No. 5126 TOOL POCKET

Designed especially for electricians. Has large utility pocket, two plier pockets, two screw driver pockets and handy knife snap. Size overall: 8½ inches high; maximum width, 6½ inches. Weight per doz. 7½ lbs.

Price, No. **5126** Tool Pocket..... each **$6.30**

HIP POCKET TOOL CASE



Made of good quality leather for carrying pliers or other tools in hip pocket; prevents cutting of clothes or possible injury to the person.

Cat. No.	Size In.	Wt. Lbs. Per Doz.	Price Each
5111	5x7	5½	**$4.00**

INSPECTOR'S LEATHER TOOL BAG



No. 5108-14

Best quality black harness leather; securely stitched edges; reinforced leather bottom, studded; two leather fastening straps, riveted on; black buckles; shoulder strap 1 inch wide, with extra piece 2¼ inches wide which serves as a pad; shoulder strap, fitted with black snap buckles, can be detached from bag.

Cat. No.	Size In.	Wt. Lbs.	Price Each
5108-14	14x8	5	**$21.80**
5108-16	16x8	5¾	**22.70**
5108-18	18x8	6	**25.50**
5108-20	20x8	6½	**28.50**
5108-22	22x8	7	**30.00**
5108-24	24x8	7¼	**31.50**

KLEIN TOOLS

NO. 5102 LINEMEN'S TOOL BAG



Extra heavy white duck reinforced all around the bottom with heavy bag leather, 3¼ inches up. The bottom is made of heavy leather outside and duck inside, lock stitched all around. Has harness leather handles and two retaining straps and buckles. Mouth of bag is formed by a 12-gauge steel frame; and the canvas is clinched between this and inside secondary steel frame.

Cat. No.	Size In.	Wt. Lbs.	Price Each	Cat. No.	Size In.	Wt. Lbs.	Price Each
5102-12	12	2¼	$14.90	5102-20	20	3½	$18.00
5102-14	14	2½	15.80	5102-22	22	3¾	18.70
5102-16	16	3	16.70	5102-24	24	4	19.20
5102-18	18	3¼	17.50	----------	----	------	--------

NO. 5105 LINEMEN'S TOOL BAG

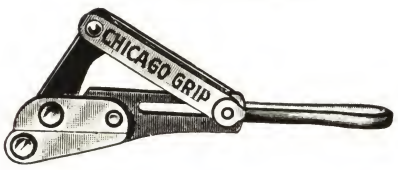


These bags are made of one-piece white duck reinforced all around the bottom with heavy bag leather, 8 inches up. The bottom is made of heavy leather outside and duck inside, lock stitched all around. Has harness leather handles and two retaining straps and buckles.

Cat. No.	Size In.	Wt. Lbs.	Price Each	Cat. No.	Size In.	Wt. Lbs.	Price Each
5105-16	16	3	$16.90	5105-22	22	4	$20.00
5105-18	18	3½	18.40	5105-24	24	4¼	20.70
5105-20	20	3¾	19.20	----------	----	------	--------

"CHICAGO" GRIPS FOR BARE WIRES

(Solid and Strand)



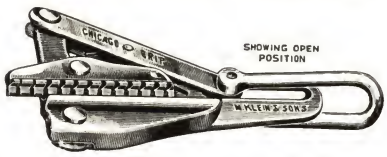
Main body piece and lever are forged steel. Draw parts are of wrought steel. Gripping jaws are machined smooth. Rivets are machine-turned and workmanship throughout is first class.

Cat. No.	Max. Wire Size B&S	Min. Wire Size B&S	Max. Open In.	Safe Load Lbs.	Price Each
1613-30	6 Solid	12 Solid	.22	1500	$5.00
1613-30B	As above but bronze lined jaws				7.50
1613-40	0 Strd.	10 Solid	.44	2250	8.00
1613-40B	As above but bronze lined jaws				13.00
1613-40H	Same as 1613-40 but with safety latch				11.00
1613-50	4/0 Strand	6 Solid	.62	4000	14.00
1613-50B	As above but bronze lined jaws				23.00

KLEIN TOOLS

"CHICAGO" GRIPS FOR INSULATED WIRES

With "Saw-Tooth" Upper Jaw

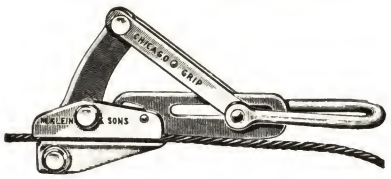


The 1611 series is similar to the 1613 series in construction but the necessary extra width in the jaws is "lipped" out to avoid unnecessary weight. The upper jaw has "saw-tooth" gripping notches.

Cat. No.	Max. Wire Size B&S	Min. Wire Size B&S	Max. Open. In.	Safe Load Lbs.	Price Each
1611-20	4 Solid	10 Solid	.50	2200	$8.00
1611-30	1 Solid	6 Solid	.56	3500	10.00
1611-40	2/0 Strd.	1 Solid	.75	3750	15.50
1611-50	4/0 Strd.	2/0 Strd.	.94	3750	15.50

IMPROVED "CHICAGO" GRIP

For Messenger, Guy Strand and Conductors Up to ½-Inch Diameter



Designed to provide in one tool a grip to handle almost every requirement on the usual job. The jaws have been lengthened and the leverage increased. No. 1628-5B has bronze-lined jaws to prevent slippage. For "all purposes" on any strand or solid wire up to ½-inch diameter with load up to 8000 pounds.

Cat. No.	Description	Price Each
1628-5B	With Bronze-Lined Jaws	$19.50
1628-5	As above but without bronze lining jaws	15.50
1628-5H	As above but with safety latch	19.50

"CHICAGO" GRIPS FOR STRANDED CONDUCTORS



The 1626 series is similar to the 1613 series construction but the necessary extra width in the jaws is "lipped" out to avoid unnecessary weight. Both gripping jaws are smooth.

Grips for other size cables made to order.

Cat. No.	Maximum Cable Size	Minimum Cable Size	Approx. Max. Opening	Safe Load Lbs.	Price Each
1626-39	336Mcm ACSR 400Mcm Copper	3/0 ACSR 4/0 Cop. Str.	.75	3750	$20.50
1626-39B	As above but bronze lined jaws				26.50
1626-40	500Mcm ACSR 600Mcm Copper	397Mcm ACSR 450Mmc Cop.	.97	3750	20.50
1626-40B	As above but bronze lined jaws				26.50
1626-AB*	336Mcm ACSR 400Mcm Copper	3/0 ACSR 4/0 Cop. Str.	.75	8000	33.50

*No. 1626-AB furnished to order. Forged from alloy steel—heat treated bronze-lined jaws.

KLEIN TOOLS

"CHICAGO" GRIPS FOR MESSENGER AND GUY STRAND, HEAVY CABLES, WIRE ROPE, ETC.



These grips fill a long-felt want, taking the heavy loads incident to larger strands without injury to the strand itself. Forged from alloy steel heat-treated. Gripping jaws are machined smooth. Rivets are machine turned and workmanship throughout is first class.

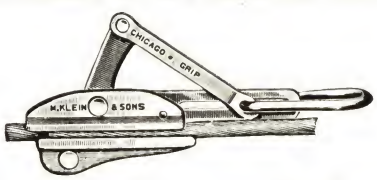
These grips frequently can be modified to accommodate cables of larger diameters. Details on request.

Cat. No.	Maximum Cable Size	Minimum Cable Size	Approx. Max. Open.	Safe Load Lbs.	Price Each
1628–6	1/8" Galv. Steel Strd. 2/0 B&S Copper Strd. 1/0 ACSR	1/8" Galv. Steel Strd. 5 B&S Copper Solid	.50	8000	**$26.00**
1628–6B	As above but bronze lined jaws				**34.50**
1628–16	5/8" Galv. Steel Strd. 300Mcm Copper Strd. 4/0 ACSR	1/8" Galv. Steel Strd. 1/8" Galv. Steel Strd. 1/0 B&S Copper Solid 2 ACSR	.69	15000	**46.00**
1628–16B	As above but bronze lined jaws				**54.00**
1628–16BP	As 1628-16 but jaws extra width. bronze lined 550Mcm Copper Strd. 477Mcm ACSR	1/0 B&S Copper Solid 2 ACSR			**61.50**

Note: Whether used on solid or strand (galvanized, copper or aluminum) it always is important to keep the jaws of grips free from any grease, accumulation of spelter or other metal which may be deposited in the grooves. This will prevent slippage and insure full efficiency.

"CHICAGO" GRIP FOR HOLLOW CORE AND LARGE DIAMETER CABLES

In the case of hollow conductors and other large diameter cables the jaws of the grip must be shaped to provide maximum enclosure and contact with the circumference of the cable itself. When so made the grip will function at maximum efficiency. Slippage is prevented and danger of crushing or collapsing hollow conductors is avoided. For above reasons grips are held in blank and finished as necessary for any particular requirement.

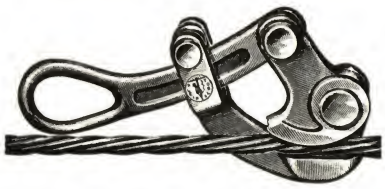


Cat. No.	Maximum Cable Size	Minimum Cable Size	Approx. Max. Open.	Safe Load	Price Each
1628–30B	1000Mcm Hollow Conductor 1250 Mcm Copper Strand 1033Mcm ACSR	350Mcm Hollow Conductor 550Mcm Copper Strand 477Mcm ACSR	1.35	20000	**$138.00**
1628–40B	1250Mcm Hollow Conductor 1750Mcm Copper Strand 1590Mcm ACSR	1000Mcm Hollow Conductor 1250Mcm Copper Strand 1033Mcm ACSR	1.60	25000	**141.50**

Bronze lining of jaws prevents slippage and consequent surface abrasion of conductor.

KLEIN TOOLS

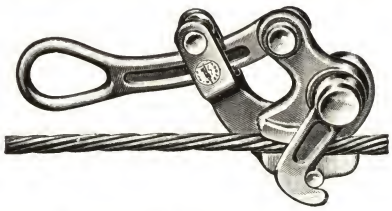
"HAVEN'S" STEEL GRIPS



Improved in design and materials. All parts solid steel drop forgings, heat treated as necessary for maximum strength and service.

Cat. No.	Approx. Max. Opening	Approx. Min. Opening	Safe Load	Wt. Lbs. Per Doz.	Price Each
	For No. 4 B&S Wire and Smaller				
1604-10	13/64 in.	1/16 in.	2500	12	**$5.50**
	For ½-Inch Wire and Smaller				
1604-20	17/32 in.	9/64 in.	5000	30	**8.00**
1604L	as above but with latch.....				**10.50**

IMPROVED "HAVEN'S" GRIPS



This grip is another improved design. All desirable features have been retained, but by use of alloy steel drop forgings properly heat treated the weight has been reduced at the same time the safe load rating has been increased.

Cat. No.	Approx. Max. Opening	Approx. Min. Opening	Safe Load	Wt. Lbs. Per Doz.	Price Each
1625-20	25/32 in.	7/32 in.	8000	45	**$16.50**

NO. 1702-20 HOWES WIRE TOOL



The strap is harness leather 1¼ inches wide and 7 feet long. At one end a forged steel swivel hook is provided with opening to permit anchoring around an insulator pin. The forward end has a locking device to hold the load at any distance and is so arranged that a wire grip can be readily attached. The shank of hook is lengthened out so as to reach under D.P. insulator when necessary.

Metal parts are galvanized. Weight per set, 2½ pounds.

Price, No. **1702-20** Single Purchase.....each **$14.50**

NO. 1700-30 LINEMEN'S TOOL



For No. 6 wire and smaller down to No. 13. This set is a combination of Chicago Grip No. 1613-30 with Howes Wire Tool No. 1702-20. Other sizes of grips can be furnished in this combination to order only. Largely used by telephone companies.

Price, No. **1700-30** Linemen's Tool.....each **$20.00**

KLEIN TOOLS

NO. 1802 HEAVY TYPE



Consists of two special double sheave blocks. The spring-guarded snaphooks and eye are drop-forgings. Side plates are wrought. Pulleys are bronze bushed and self lubricating. Manila 4-strand rope, spliced to eye of block with galvanized thimble. Runs free and does not twist.

Cat. No.	Length Rope	Diam. Rope Inches	Wt. Lbs. Each	Price Per Set
1802-40	30 Feet	½	15½	**$33.00**
1802-50	30 Feet	⅝	17¾	**37.00**
1802-60	30 Feet	¾	19½	**39.00**

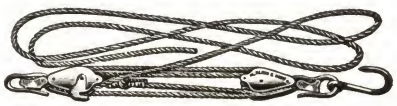
NO. 1802-30 SELF-LOCKING TYPE



Furnished complete with light galvanized steel shell blocks, fitted with snubbing hook to lock load in any position, and 25 feet ⅜-inch manila rope. To lock the load, it is only necessary to pull the luff rope under the hook; to release, simply pull the rope. Weight each, 3 pounds.

Price, No. **1802-30** Troublemen's Blocks.....**$10.50**
No. **1802-30-S** as above but with swivel anchor hook 259..... **11.00**

SELF-LOCKING BLOCK TACKLE



This set of blocks is identical with No. 1802-30 set except that the snaps are "guarded." The nose of each hook has been lengthened to extend over the latch or keeper.

Furnished with 25 ft. ⅜-inch 4-strand manila rope and detachable hook No. 258.

Price, No. **H-1802-30** Block Tackle.....each **$12.50**
No. **H-1802-30-S** with 259 swivel anchor hook **13.00**

NO. 258 ANCHOR HOOK FOR TACKLES



This hook is a solid steel drop forging. It is approximately 5½ inches overall length x 3¼ inches across the hook. The eye has an inside diameter of ⅝-inch to engage with Tackles 1802-30 and H1802-30. Galvanized finish.

Specially shaped to slip under D.P. insulator and engage insulator pin on crossarm.

Price, No. **258** Hook (2-in. opening)....each **$1.80**

KLEIN TOOLS

NO. 1803 HAND LINE



No. 1803-60 is furnished complete with 75 feet of ⅜-inch best quality Waterflex Manila rope, 4 strand. No. 1803-120 is the same with 120 feet of rope.

These lines are designed for maximum safety and service. Rope is spliced to eye of snap hook with galvanized thimble. Can be furnished with any different length of rope to order.

Cat. No.	Description	Wt. Lbs. Each	Price Each
1803-60	With 75 Feet Rope.....	3½	**$11.00**
1803-120	With 120 Feet Rope.....	5¼	**15.00**

NO. 443-A SNAP



This snap is used on hand lines, 1803 series. Can be used on all light hoisting — for roofers, etc. Galvanized finish. Will carry loads up to 2000 pounds. The hook and eye are an integral drop forging. When fitted to a 4-inch tackle block this hook provides an ideal means for connecting with come-along; no taping is necessary.

Price, No. **443-A** Snap .....each **$2.50**
No. **470** Swivel Snap Handline..... **2.30**

NO. 3146 LINEMAN'S WRENCH

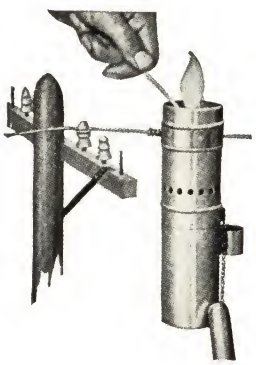
Bell System Type



Forged of select bar steel and is of the open end type with two openings of different size at each end. At the larger end the openings are 1⅛-inch and $\frac{15}{16}$-inch, the smaller end $\frac{13}{16}$-inch and ⅝-inch. There is a hole provided at the larger end so that wrench may be used for turning in standard pole steps. Particularly adapted for use on the heavier 3-bolt guy clamps on which the clearance for a wrench is limited.

No. 3146-A same as No. 3146 but modified for ¾-inch hardware.

Cat. No.	Length Inches	Wt. Lbs. Per Doz.	Price Each
3146	13	23	**$5.00**
3146-A	13	23	**5.00**



STAYSALITE LINEMAN'S TORCH

This torch burns alcohol without odor or noise. It is carried in the lineman's belt and does away with the ground man. It is hung directly on the wire under the joint to be soldered. Also used as a small heater or soldering iron and is provided with a cup for holding soldering paste.

Cat. No.	Wt. Lbs. Each	Price Each
3420	1¼	**$15.00**

KLEIN TOOLS

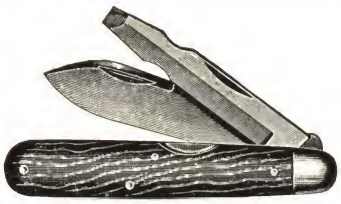
NO. 1629 FISH-TAPE PULLER



A simple, husky come-along for fish-tape. To engage puller on fish-tape place the tape sideways in slot and give puller a slight forward motion while pushing tape deeper into the slot. (This slips tape under the ratchet wheel.) User now has positive grip on the tape. Slide forward on tape to position for new bite. Does not injure the tape, 3¾ inches long, can be carried in the pocket.

Cat. No.	Description	Wt. Lbs. Per Doz.	Price Each
1629	For Standard Fish Tapes..	2½	**$3.50**
1629-A	Modified for No. 12 Iron Wire	2½	**3.50**

NO. 1550-2 "XELA" ELECTRICIAN'S KNIFE



Blades are made of high grade cutlery steel carefully tempered.

Locking feature on screw-driver blade is simple and of such construction that it does not wear out.

It automatically locks the blade when open, yet a slight pressure of the thumb releases the lock and permits blade to be closed readily; handle of cocobola, hard and durable.

Price, No. **1550-2** Double Blade.....each **$3.50**

NO. 1515-1 CABLE SHEATH SPLITTING KNIFE



Blade tempered and ground to keen edge. Has strong leather handle, securely fastened. Temper-blued finish. A sturdy knife, will stand hard usage. Length overall 8¾ inches; blade 4½ inches.

Price, No. **1515-1** Sheath Splitting Knife.....**$5.00**

NO. 1560-3 SKINNING KNIFE

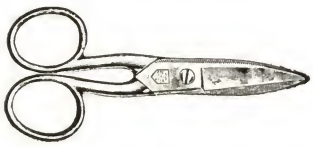


This skinning knife has "half hard" rubber handle molded on securely and provides adequate insulation as well as a generous grip. Shouldered out at the blade to prevent accidental cutting of glove or finger. Shape of blade brings the point below the curve. Back of blade ground flat for scraping. Hole in handle is through the solid rubber. Forged from first quality cutlery steel individually tempered.

Price, No. 1560-3 Skinning Knife.....each **$3.50**

KLEIN TOOLS

NO. 2100-5 "XELA" ELECTRICIAN'S SCISSORS



A scissors designed for the electrician and mechanic. Will stand continued hard service. Made of high-grade steel properly tempered.

Has a screw hinge, allowing adjustment. Nickel-plated finish.

Price, No. **2100-5** 5-inch.....each **$3.50**

INSPECTOR'S POCKET TOOL KIT

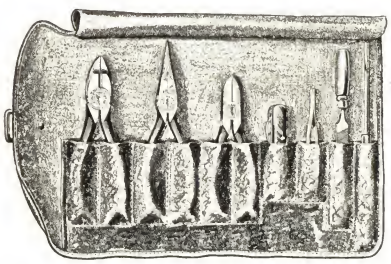
Solid black leather folding case, strongly stitched. Fitted with one each of the following tools:

201-6 Side Cutting Plier.
301-6 Long-Nose Plier.
1550-2 "Xela" Knife.
1 Pair Electrician's Tweezers.
1 Special File.
1 Insulated Screw-driver.



Price, No. **1305-2** Pocket Tool Kit.....each **$22.30**

NO. 1305-33A POCKET TOOL ROLL

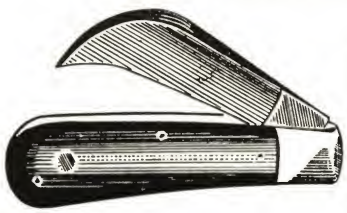


Designed for mechanics, service men, electricians. Keratol Rol with strap and buckle. Size, rolled 8x2½ inches diameter.

Comprises the following:
1 No. 201-6 N. E. Side Cutting Plier
1 No. 301-6 Long Nose Plier
1 No. 202-5 Oblique Cutting Plier
1 No. 1550-2 Electrician's Knife
1 File
1 Pair Electrician's Tweezers
1 Insulated Screwdriver

Price, No. **1305-33A** Pocket Tool Roll..each **$29.90**

No. 1550-4 LINEMEN'S KNIFE



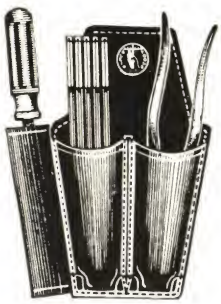
Sturdily constructed knife designed for long, hard service. The 3-inch blade is of fine grade cutlery steel, carefully tempered. The hooked shape makes it ideal for general use.

Selected hardwood handle is rounded and shaped for firm, comfortable grip. When opened, the blade automatically locks in position.

Price, No. **1550-4** Linemen's Knife.....each **$4.00**

KLEIN TOOLS

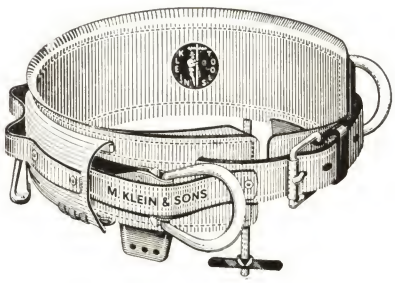
No. 5118-PRS ALL-PURPOSE PLIER POCKET



An all-purpose pouch for pliers, folding rule and screw driver. Openings at bottom. Top of double thickness to permit riveting to belt. Size overall: 8¾ inches high, maximum width 6½ inches.

Cat. No.	Wt. Lbs. Per Doz.	Price Each
5118-PRS	8	.....

"KLEIN-LINE" TOOL BELT



This sturdy "Klein-Line" Tool Belt is designed to provide a maximum factor of safety with increased comfort and convenience to the lineman.

A full-floating, sliding trace of the famous "Klein-Kord"* Material, 1¾ inches wide, carries the single bar Dee rings. This trace slides, allowing approximately 6 inches of free movement. By this means the lineman is relieved of the chafing that is unavoidable with conventional belts, and undue wear on the safety strap is prevented. New apron design permits visual inspection of sliding trace throughout its entire length.

This apron, securely riveted to the belt, also carries the weight of tools in the harness leather tool loop strap. The tool strap, 1¼ inches wide, has five tool loops — is riveted on the apron with a reinforcing strap.

The soft, pliable, latigo leather cushion — 4¾ inches wide — is pad-lined and edge-rolled for comfort. The 2-inch wide belt strap is of heavy harness leather with drop-forged buckle. A leather pad under the buckle provides additional comfort. Buckle and Dee rings tested to 1500 pounds. All sewing is lock stitched with hot waxen linen thread — rivets are solid copper, hand set. No rivets come through the body pad — an extra safety insulating feature. Fitted with tape thong, knife snap and ring for glove pouch. Furnished with pocket tabs on both sides, punched for lacing. One, two or three partition holsters can be furnished to order.

Cat. No.	Description	Wt. Lbs. Per Doz.	Price Each
5249	With Standard "D" Rings. Width 4¾ inches.....	55	.....

Made in sizes 36, 38, 40, 42, 44 and 46 inches.

*Rated tensile strength per square inch, 5660 lbs.

KLEIN TOOLS

"POLE-MASTER" LINEMEN'S CLIMBERS



No. 1945

Extra wide stirrup gives more arch support. Leg irons are flexible and tapered in width and thickness so that ankles and calves get better support without chafing. "Pole-Master" Climbers have an offset shank that brings gaff in proper line with the leg bone to provide greater security and comfort.

Made in matched pairs — one "right," the other "left" — with drop forged triangular strap rings at ankle. Stock sizes in fixed length pattern: 15, 15½, 16, 16½, 17, 17½ and 18 inches, measured from instep to end of shank. Adjustable pattern climbers are adjustable to 15, 15½, 16, 16½, 17, 17½ and 18 inches, measured from instep to top of slide. Special sizes in either fixed or adjustable climbers made to order. Every climber individually tested.

Gaffs 3½ inches long measured on the outside. All climbers have aluminum finish.

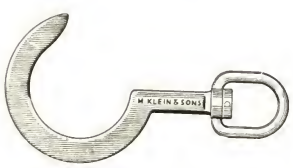
When Ankle Straps No. 5301-16 or 5301-26 are desired attached at the factory, specify on order.

No extra charge.

Cat. No.	Description	Price Each
1945	Drop Forged Triangular Strap Rings at Ankle.....	.....
1945-ADJ	Drop Forged Triangular Strap Rings at Ankle.....	.....
C1945-ADJ	Complete with Straps and Pads	.....

Adjustable Climbers are available completely assembled with Straps and Pads. The following items are furnished with this assembly: No. 5301-9 Calf Straps, No. 5301-26 Angle Straps and No. 8207 Climber Pads.

SWIVEL ANCHOR HOOK FOR TACKLES



This hook is a solid drop forging. It is 6½ inches long and 3¼ inches across the hook. Swivel clevis and engage readily with snap on Klein Tackles 1802-30 and H-1802-30.

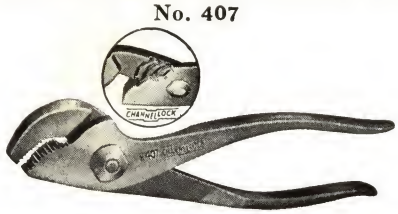
The swivel relieves trouble from twisting and kinking of the rope when used on a slack line. Galvanized finish. Specially shaped to slip under D.P. insulator and engage insulator pin on cross arm.

Cat. No.	Description	Price Each
259	Drop Forged Hook with Swivel.....	$2.30

CHAMPION DeARMENT TOOLS
CHANNELLOCK SELF-GRIPPING PLIERS

The Channellock design provides a quick, positive grip when pressure is applied to only one handle. The greater the pressure, the tighter the grip. The exclusive tongue and groove joint makes a plier far superior to the conventional type.

No. 407



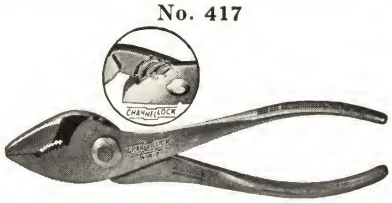
This plier is primarily intended for battery work. The self-gripping feature insures a positive grip on acid corroded and mutilated terminal nuts. Polished steel finish. Length, 7 inches; capacity, ⅛ to ⅝ inch. Packed 6 to a carton; weight per dozen, 6¼ lbs.
Price, No. **407**.....each **$2.30**

No. 410



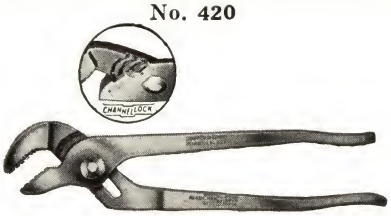
A heavy-duty self-gripping plier which will hold work of any shape with a positive pipe wrench grip. Polished steel finish. Length, 9½ inches; capacity, ⅜ to 1⅛ inches. Packed 6 to a carton; weight per dozen, 12½ pounds.
Price, No. **410**.....each **$3.20**

No. 417



A heavy-duty plier with a gripping power many times greater than the ordinary slip-joint plier. Polished steel finish. Length, 7 inches; capacity, ⅞ inch. Packed 6 to a carton; weight per dozen, 6¾ pounds.
Price, No. **417**.....each **$2.30**

No. 420



The wide range of adjustments of the No. 420 Pump Plier makes it adaptable to a multitude of uses. The adjustment eliminates wear on the joint bolt and greatly prolongs the life of the tool. Five adjustments. Length, 9½ inches; capacity, ⅜ to 1⅝ inches. Packed 6 to a carton; weight per dozen, 9 pounds.
Price, No. **420**.....each **$2.90**

CHAMPION DeARMENT TOOLS
CHANNELLOCK SELF-GRIPPING PLIERS



This ignition plier incorporates the Channellock adjustment feature in order to eliminate wear on the joint bolt and lengthen the life of the tool. A midget plier. Polished steel finish. Length, 4½ inches; capacity ½ inch. Packed 6 to a carton; weight per dozen, 1 pound.
Price, No. **424**.....each **$2.00**

CHANNELLOCK STANDARD PATTERN PLIERS

No. 307 BATTERY PLIER—LAP-JOINT



Blued finish.
No. **307**—Length, 7 inches; weight per dozen, 4¼ pounds; capacity, ¼ to ⅝ inch.....each **$1.60**

No. 317½ LONG NEEDLE-NOSE PLIER
With Side-Cutter



No. **317½**—Length 7½ inches; weight per dozen, 5 pounds .....each **$3.10**
No. **3017½** same as above without side cutters .....each **$2.40**

No. 326 NEEDLE-NOSE PLIER
With Side-Cutter



No. **326**—Length, 6 inches; weight per dozen, 3¾ pounds .....each **$2.80**
No. **3026**, same as above without side cutter .....each **$2.20**

No. 337 DIAGONAL CUTTING PLIER
Lap Joint



Polished steel finish. Knurled handles.
No. **337**—Length, 7 inches; weight per dozen, 6 pounds .....each **$2.60**

No. 348½ LINEMEN'S PLIER—ROUNDED NOSE



No. **348½**—Length, 8½ inches; weight per dozen, 10¾ pounds .....each **$4.00**
No. **347**—Length, 7 inches; weight per dozen, 6¾ pounds .....each **$3.10**
No. **346**—Length, 6 inches; weight per dozen, 5 pounds .....each **$2.80**
The above pliers packed 6 per carton.

PEXTO HAND TOOLS

PEXTO RATCHET BIT BRACES



Box ring ratchet. Forged steel pawls. Jaws, forged steel, spring alligator pattern. Packed one-sixth dozen in a box.

Cat. No.	Description	Sweep Inches	Wt. Lbs. Per Doz.	Price Each
5310	Ratchet Bit Brace	10	38	**$7.75**
5312	Ratchet Bit Brace	12	42	**8.00**

EXPANSIVE AUGER BITS



Clark's Pattern. Forged steel, full polished.

Cat. No.	Description	Length Inches	Wt. Lbs. Per Doz.	Price Per Doz.
50	Small size, with Cutters Nos. 01 and 02.....	7½	3	**$30.00**
100	Large size, with Cutters Nos. 03 and 04.....	9½	8	**33.00**

No. 31P FIRMER CHISELS



Forged steel, hardened and tempered. Plastic handle. Length of blade, 4½ inches. Packed one-half doz. in box.

Size, Inches	½	¾	1
Wt. Lbs., per doz.....	5	7	8
Price each	**$2.10**	**$2.20**	**$2.50**

No. 33 BUTT CHISELS



Forged steel, hardened and tempered. Plastic handle; bevel back blade. Length of blade 3½ inches. Packed one-half dozen in a box.

Size, Inches..	¼	⅜	½	¾	1	1¼
Wt. Lbs., per doz.	3½	3⅝	3¾	4½	4⅝	5⅛
Price each	**$1.60**	**$1.60**	**$1.80**	**$2.00**	**$2.10**	**$2.30**

No. 3 SCREW DRIVERS



Handle is strong, tough composition in clear amber color, fluted for comfortable grip. Blade is special alloy steel, forged and tempered.

Size, Inches			Wt. Lbs. Per Doz.	Price Per Doz.
Length Blade	Width Point	Length Overall		
4	5/16	7⅞	3½	**$8.40**
6	5/16	10½	4½	**12.00**
8	5/16	12½	5	**15.00**

PEXTO HAND TOOLS

NAIL HAMMERS



Head satin black enamel with highly polished face, poll and front of claws. Hickory handle, Vermont maple stain. One-half doz. in a box.

Cat. No.	Description	Wt. Oz. Less Handle	Length Handle	Price Per Doz.
11½	Round neck and poll	16	13	**$32.90**

MACHINISTS' BALL PEIN HAMMERS

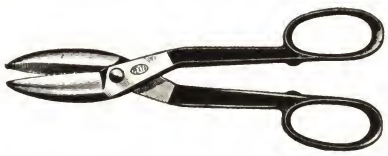


Octagon pattern, plain eye. Forged steel, hardened and tempered. Head satin black enamel finish with highly polished face, poll and pein. Hickory handle, Vermont maple stained.

No. & Size	Wt. Oz. Each	Length Handle	Wt. Lbs. Per Doz.	Price Per Doz.
3	28	16	25	**$32.00**
2	24	15½	23	**29.42**
1	20	15	21	**27.00**
0	16	14	18	**25.75**
00	12	13½	13	**24.50**

Packed: No. 1 and larger ⅓ dozen in a box.
No. 0 and smaller ½ dozen in a box.

TINNERS' HAND SNIPS



Combination Pattern. Blue enamel handles and polished heads. Packed one in a box.

Cat. No.	Length, Inches Of Cut	Length, Inches Overall	Wt. Lbs. Per Doz.	Price Each
219	3	12¼	22	**$3.40**
220	2½	10½	17	**2.60**

No. T45 ADJUSTABLE ANGLE WRENCHES



Thin jaw type. Follows pattern of Solid Engineers End Wrench. Packed one in a box.

Size Inches	Capacity Inches	Wt. Lbs. Per Doz.	Cases of Dozen	Wt. Lbs. Per Case	Price Each
6	¾	3½	6	30	**$2.00**
8	15/16	6	6	42	**2.25**
10	1⅛	10½	6	78	**2.70**
12	1 5/16	19	6	135	**4.00**

PEXTO HAND TOOLS

SLIP JOINT COMBINATION PLIERS



Thin nose, nickel finish. Has tapered jaws with deeply milled teeth. Has wire cutter. Packed one-half dozen in a box. Weight per dozen, 6 lbs.

No. **10** — 6½" Slip Joint Pliers.
Price per doz. **$13.10**

No. 500 SIDE CUTTING PLIERS



Side cutting, lap-joint. Plain handles. Black finish. Polished head. Packed ½-dozen in box.

Size, Inches	6	7	8
Wt. Lbs., per doz.....	6	9	12½
Price, each	**$2.84**	**$3.30**	**$4.42**

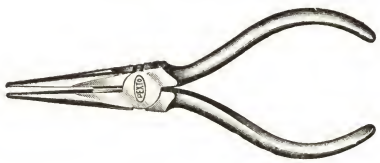
No. 40 SIDE CUTTING PLIERS



Side cutting, lap-joint. Plain handles. Black finish. Packed one-half dozen in a box.

Size, Inches	6	7	8
Wt. Lbs., per doz.....	5	8	10½
Price, each	**$2.40**	**$2.70**	**$3.10**

CHAIN NOSE PLIERS

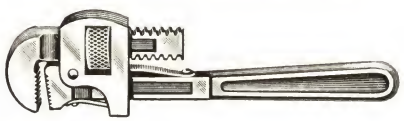


Long chain-nose, side-cutting, lap-joint. Plain handles, Dulite finish. Polished head.

Cat. No.	Size Inches	Length Jaws, In.	Wt. Lbs. Per Doz.	Price Each
63	6	1⅞	3	**$2.75**

Packed one-half dozen in a box.

No. 11 PIPE WRENCHES



With steel handle.

Size In.	Cap. Inches	Wt. Lbs. Per Doz.	Price Each	Size In.	Cap. Inches	Wt. Lbs. Per Doz.	Price Each
6	⅛-½	6	**$1.52**	10	⅛-1	20	**$2.28**
8	⅛-¾	12	**1.76**	14	¼-1½	39	**3.08**

PEXTO HAND TOOLS

COMMON COLD CHISELS



Cut In.	Lgth. In.	Wt. Lbs. Per Doz.	Price Per Doz.	Cut In.	Lgth. In.	Wt. Lbs. Per Doz.	Price Per Doz.
½	6	4	**$7.30**	¾	7½	11½	**$12.00**
⅝	6½	7	**9.50**	....	.....	.....	.....

RIVETING HAMMERS



Size	Weight	Price Per Doz.	Size	Weight	Price Per Doz.
2	8 Oz.	**$31.30**	3	12 Oz.	**$32.40**
--	.....	.....	4	16 Oz.	**33.60**

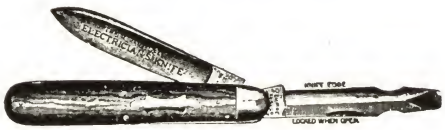
BROAD HATCHETS



Size	Size of Cut In.	Price Per Doz.
2	4½	**$26.00**
3	5	**30.00**
4	5½	**33.00**
5	6	**37.00**

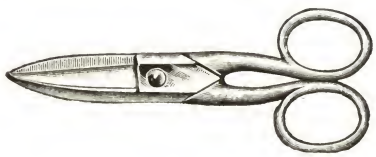
ELECTRICIAN'S TOOLS

ELECTRICIANS' KNIVES



Mfrs. No.	Description	Price Each
1550-2	Double Blade	**$3.50**

ELECTRICIANS' SCISSORS



Mfrs. No.	Length Inches	Finish	Price Each
2100-5	5	Nickel Plated	**$3.50**

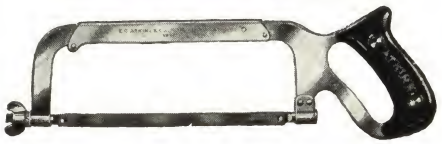
ELECTRICIANS' SNIPS



Cat. No.	Description	Price Each
271-12	9 Inches Long, 2 Inch Blade.....	**$1.00**
271-9	12 Inches Long, 4 Inch Blade.....	**1.50**
271-7	14 Inches Long, 4 Inch Blade.....	**2.00**

SAWS AND FRAMES

HACK SAW FRAME NO. 10



Cat. No.		Price Each
10	Nickel Plated, Adj.; without blades.....	$2.00

"AAA" HACK SAW BLADES



Cat. No.	Length Inches	Width Inch	No. Teeth Per Inch	Wt. Lb. Per Gross	Price Per Gross
200	8	7/16	18	4½	$8.00
200	10	½	18	5½	10.00
200	12	½	18	6½	12.00
210	8	7/16	24	4½	8.00
210	10	½	24	5½	10.00
210	12	½	24	6½	12.00
215	8	7/16	32	4½	8.00
215	10	½	32	5½	10.00
215	12	½	32	6½	12.00
220	8	9/16	14	5	9.00
220	10	9/16	14	6½	10.20
220	12	9/16	14	8	12.60

ELECTRICIANS' BX SAW



Made for standard 8 inch saws or special slotted saws supplied for quick replacing or deeper cuts. Especially designed for cutting steel armored cables, although can be successfully used for cutting fixture tubing, sawing lead sheath off cables, cleaning between segments in commutators, etc. Furnished with special slotted blades.

Complete with Blade—Price Each.....$1.50
Extra Blades—Price Per Gross.....10.00

CABLEMEN'S SAW



Cat. No.	Type	Length Inches	Price Each
906-14	Double Edge	14	$2.60

COMPASS SAWS



State Length Wanted

Length Inches	Price Per Doz.	Length Inches	Price Per Doz.
10	$8.50	16	$10.00
12	9.00	18	10.50
14	9.50	....	.....

HAND, PANEL AND RIPSAWS

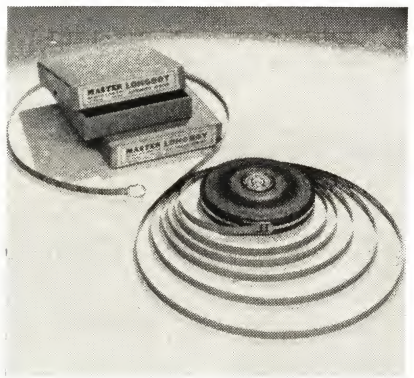


Crucible Steel, apple wood handle, skew or straight back.

Length Inches	Price Per Doz.	Length Inches	Price Per Doz.
16	$29.00	22	$39.00
18	32.00	24	42.00
20	35.00	26	44.00

MASTER RULES

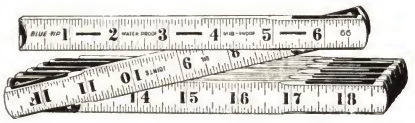
LONGBOY STEEL TAPE RULE



Available in graduations of 1/10's and 1/8's in 50 ft. lengths. Blades are replaceable, interchangeable. Packed 2 to a carton.

Price, Longboy Rule .....each $12.00
Replacement Blade .....each 6.00

No. 66 BLUE TIP WOOD FOLDING RULE



Designed for hard use, the Blue Tip is finished in attractive boxwood color. Has a glass hard lacquer finish over figures and graduations. Finest straight grain maple is used in construction. Also in 66F for flat reading, packed one dozen to a box.

Price, No. **66** (6 ft.) Wood Folding Rule .....each $1.10

No. 796 BLUE END WOOD FOLDING RULE



Two piece simplified construction of the brass plate joints protects against stretching, assures continued accuracy. Double edge figures and graduations are protected by a covering of waterproof lacquer. Finished in white baked enamel.

Also supplied in 796F for flat reading, weight 3 pounds per dozen. Packed ½ dozen to a box.

Price, No. **796** (6 ft.) Wood Folding Rule .....each $1.50

No. X6 EXTENSION FOLDING RULE



Light weight construction with a slide rule of solid etched brass inserted in first 6-inch stick. Extension has a spring stop in the extended position. Packed ½ dozen to a box.

Price, No. **X6** Extension Folding Rule .....each $1.85

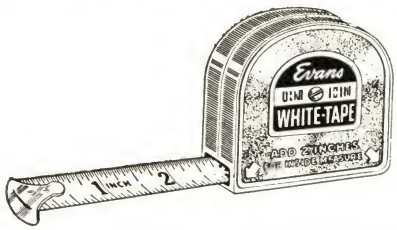
INTERLOX SLIDE RULE



The Interlox is designed to open telescope fashion for speedy "one glance" inside and outside measurements. Made of finest straight grain maple, every stick is replaceable.

Price, No. **104** (4 ft.) Slide Rule.....each $2.25
No. **106** (6 ft.) Slide Rule.....each 2.50
No. **108** (8 ft.) Slide Rule.....each 3.00

EVANS "WHITE-TAPE" STEEL RULE



Jet black markings on snow white steel with big bold numerals for quick, easy reading. High carbon steel blade is tempered, Bonderized, enamelled and baked on new electrothermically controlled equipment. Tape stays "live," stays white far longer. Blade ½-inch wide. White both sides.

Sturdy die-cast case with exclusive "sure-grip edges". Heavily chrome plated. Measures inside and outside. Automatic brake prevents creep, yet does not touch either surface of tape. Cannot blur numerals or graduations. Replacement blades at real economy — only **$0.45** for the six-foot size. Fully guaranteed for accuracy and workmanship.

Individually packed, each dozen in multicolor counter display unit. Eye-stopping easel-backed display card with each dozen unit.

Cat. No.	Size Feet	Std. Pkg.	Carton	Price Each	Replacement* Blades
106W	6	1	12	**$0.98**	**$0.45**
108W	8	1	12	**1.19**	**.60**
110W	10	1	12	**1.49**	**.75**

* List price each.

GREENLEE ELECTRICIAN'S BITS

No. 1440 PIPE BIT SET



This set of six fast-cutting bits (⅞, 1⅛, 1⅜, 1¾, 2 and 2½-inch diameters) is designed for the use of plumbers, electricians and steamfitters and boring holes in wood for pipe and conduit. They are furnished in a sturdy, metal box having a convenient carrying handle.

The bits have an overall length of approximately 6 inches and all have ½-inch shanks for use in portable electric or pneumatic drills and in stationary boring machines. An adapter is provided, however, for using a standard auger-bit brace. Adapters are also furnished for using a piece of standard ⅜-inch pipe as an extension for deeper boring and longer reach.

Weight 7 pounds.

Price, No. **1440** Pipe Bit Set.....each **$39.00**

Parts for No. 1440 Pipe Bit Set

Spare Parts	Price
⅞" 149-P Bit for ½-inch pipe	**$2.65**
1⅛" 149-P Bit for ¾-inch pipe	**3.25**
1⅜" 149-P Bit for 1- inch pipe	**4.10**
1¾" 149-P Bit for 1¼-inch pipe	**5.70**
2" 149-P Bit for 1½-inch pipe	**6.50**
2½" 149-P Bit for 2- inch pipe	**12.50**
149-P-2 Coupling	**1.40**
AV2374 Electric Drill Adapter	**1.40**
149-P-1 Brace Adapter	**1.60**

GREENLEE ELECTRICIAN'S BITS

No. 18 UNISPUR POWER BIT



A fast-boring, double-twist auger bit especially designed for electric drill use, having a twist length of 5½ inches, a shank diameter of 23/64 inch, and an over-all length of 8½ inches.

Size 16ths	Price Per Doz.	Size 16ths	Price Per Doz.	Size 16ths	Price Per Doz.
11	**$18.75**	13	**$21.40**	16	**$24.50**
12	**18.75**	14	**21.40**	....	.....

No. 45 SHORT UNISPUR POWER BIT

Head and shank details of this shorter auger bit are the same as the No. 18. The twist length is approximately 3 inches, and over-all length 6 inches.

Size 16ths	Price Per Doz.	Size 16ths	Price Per Doz.	Size 16ths	Price Per Doz.
11	**$18.75**	12	**$21.40**	16	**$24.50**
12	**18.75**	14	**21.40**	....	.....

No. 902-1 BRACE ADAPTER



Permits the use of No. 18 or No. 45 Power Bits, or the No. 902 Extension, in any standard brace. This adapter is 4½ inches long and has standard brace shank and $\frac{21}{32}$-inch diameter head provided with two setscrews for positive coupling.

Packed ½ dozen per box.

Price, No. **902-1** Brace Adapter.....each **$1.30**

No. 902 POWER BIT EXTENSION



Made in 18- and 24-inch lengths, these extensions have a $\frac{21}{32}$-inch body section 1½ inches in length provided with two setscrews to hold bits with $\frac{23}{64}$-inch shanks. Two or more sections may be locked together for a longer reach.

Price, 18-inch size.....**$1.65**; 24-inch size.....**$1.80**

No. 87 POWER PIPE BITS



These bits are specifically patterned for the plumber or electrician to bore holes for pipe or conduit. Double-twist type, having twist lengths ranging from 7¼ to 8½ inches, with overall dimensions from 14 to 17 inches.

Size Inches	Description	Packing Per Box	Price Per Doz.
1¼	For ¾-inch pipe	6	**$42.75**
1½	For 1- inch pipe	6	**51.00**
1¾	For 1¼-inch pipe	3	**60.25**
2	For 1½-inch pipe	3	**69.50**
2½	For 2- inch pipe	2	**108.00**

GREENLEE ELECTRICIAN'S BITS

No. 21 SOLID CENTER ELECTRICIAN AUGER BITS



These auger bits have a solid center type of twist, and single cutter head of the extension lip pattern. Fitted with a coarse screw point for fast feed, and have one spur for outlining hole, which insures smooth boring.

Standard package, ½ dozen in box.

Sizes in 16ths. Price per dozen.

Size	10	11	12
Price	$11.40	$13.30	$13.30

No. 16 UNISPUR ELECTRICIAN'S AUGER BITS



Sizes 4/16 inch through 10/16 inch are of standard Auger Bit dimensions; sizes 11/16 inch and larger have 5½-inch twist length, overall length 10 inches.

Size 16ths	Price Per Doz.	Size 16ths	Price Per Doz.	Size 16ths	Price Per Doz.
4	$11.00	9	$13.20	14	$18.15
5	11.00	10	13.20	15	20.90
3	11.00	11	15.40	16	20.90
7	12.10	12	15.40	18	26.40
8	12.10	13	18.15	20	30.80

No. 44 SHORT UNISPUR AUGER BITS



This pattern is made with a short twist and overall length for plumbers' use. Sizes 1-inch and smaller have about 3-inch twist, 5½-inch overall length, and larger sizes 2¼-inch twist, 5½-inch overall length. The smaller sizes have a medium pitch screw point, and the larger sizes, to permit easy boring, are fitted with a finer point.

Standard package is 6, sizes 1¼-inch and under; 3, in sizes over 1¼-inch.

Size 16ths	Price Per Doz.	Size 16ths	Price Per Doz.	Size 16ths	Price Per Doz.
11	$15.40	16	$20.90	24	$39.60
12	15.40	18	26.40	28	48.40
13	18.15	20	30.80	32	57.20
14	18.15	22	35.20	40	123.20

No. 48 BELL HANGER DRILL



This drill is made with twist 3¾ inches long.

Sizes in 32nds. Price per dozen.

Size	6	8	10	12	14	16
Price:						
12-inch	$11.60	$12.40	$13.50	$14.75	$16.25	$18.60
18-inch	15.50	16.25	17.00	18.60	20.25	22.50
24-inch	19.40	20.25	21.00	22.50	24.00	26.35

GREENLEE EXPANSIVE BITS

NOS. 3 AND 4 PLAIN EXPANSIVE BITS



Standard packing, one in box; half dozen in carton.

Cat. No.	Description	Wt. Lbs. Per Doz.	Price Per Doz.
3	Small, ½ to 1½-inch	3⅛	$20.00
3A	Cutter, ½ to ⅞-inch	⅛	3.00
3B	Cutter, ⅞ to 1½-inch	¼	3.75
	Extra Clamps	⅛	1.44
	Extra Clamp Screws	⅛	.60
4	Large, ⅞ to 3-inch	7½	26.00
4A	Cutter, ⅞ to 1¾-inch	⅜	5.25
4B	Cutter, 1¾ to 3-inch	⅝	6.00
4C	Cutter, 2½ to 4-inch	⅞	9.00
	Extra Clamps	⅜	1.80
	Extra Clamp Screws	¼	.70

NOS. 5 AND 6 SETFAST EXPANSIVE BITS

(Patent No. 1,727,452)



Standard Packing in leatherette case; one in box, half dozen in carton.

Cat. No.	Description	Wt. Lbs. Per Doz.	Price Per Doz.
5	Small, ⅝ to 1¾-inch	5	$33.00
5A	Cutter, ⅝ to 1⅛-inch	¼	4.50
5B	Cutter, 1⅛ to 1¾-inch	⅜	5.65
	Extra Adjusting Barrels	⅛	2.25
	Extra Eccentric Pins	⅛	2.25
6	Large, ⅞ to 3-inch	8¼	39.00
6A	Cutter, ⅞ to 1¾-inch	⅜	7.90
6B	Cutter, 1¾ to 3-inch	⅜	9.00
6C	Cutter, 2½ to 4-inch	⅞	13.50
	Extra Adjusting Barrels	¼	2.70
	Extra Eccentric Pins	¼	2.70

GREENLEE BIT EXTENSIONS



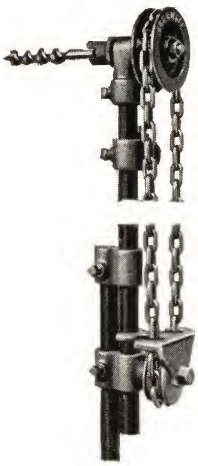
No. 900 has sufficient strength to drive a bit up to 1-inch diameter but small enough to follow a ⅝-inch bit. An accurately shaped recess in the chuck accommodates shank of bit, which is held by drawing holding sleeve against corners of the square.

No. 925 bit extension is similar in design except made extra heavy to follow a ⅛-inch auger bit and drive tools up to 2-inch diameter.

Standard packing, 1 in leatherette case.

	Price Each			
Lengths, In.	15	18	21	24
No. 900	$2.85	$2.95	$3.10	$3.25
No. 925	.....	3.60	.....	3.80

GREENLEE NO. 750 JOIST BORER



Makes the electrician's job of joist boring easier by combining the latest developments in design with a construction that is accurate and high grade.

The bit chuck runs smoothly in needle bearings and is sturdy enough to drive bits that are larger than those used in other types of borers. Equipped with heavy round-link chain and newly designed Idler Pulley Safety Guard that prevents injury to the operator's hand. The steel chuck drives bits up to 1¼ inches in diameter. Foot Rest for supporting frame on floor, and one ⅛-in. No. 44 Short Unispur Auger Fit furnished as equipment with each machine.

Cat. No.	Description	Price Each
750	Joist Borer (weight, 13 lbs.)	$25.00

No. 750 Joist Borer Parts List

Cat. No.	Description	Price Ea.
AV 71	Chain Sprocket	$1.10
AV 93	Pulley Hanger	1.00
AV 94	Spindle Head	1.15
AV 95	Foot Rest	3.50
AV 96	Bit Chuck Cap	1.40
AV 97	Bit Chuck Nut	.65
AV 98	Spindle	1.75
AV 99	Idle Pulley Guard	1.00
AV100	Idle Pulley	.60
AV252	Adjustable Clamp	.90
AV319	Adjustable Rest	1.00
AV388	Welded Round-Link Chain, 13½ feet	9.50
670 GB	Woodruff Key	.05
671 GB	Lockwasher	.10
672 GB	Spindle Nut	.10
818 GB	Needle Bearings (2)	.75
1833GB	½ x 2¼" Hexagon Cap Screw	.05
1940GB	⅜ x ¾" Square-Head Set Screws (6) each	.05
1314V	½-inch Washer	.05

IDEAL BORING MACHINE

Packaged unit. Sold knocked down, less pipe. Assembled on the job using ½-inch pipe or rigid conduit.

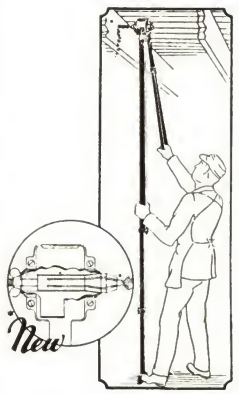
Drills holes at right angles (or at any angle) to rafters, joists or studdings for both floor and overhead work. The right angle boring makes a neater and better job and consumes less wire.

The Ideal bores five times as fast as brace or breast drill. It is quickly adjustable to any height from 7 to 11 feet on overhead work.



Description	Price
No. 36-001 Boring Machine with 11/16" Bit	$55.00

HYKON BORING DEVICE



A high speed Boring Machine which has been used and endorsed by thousands of electricians for over 25 years.

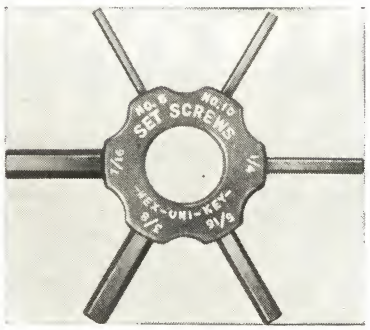
Recent improvements, including the self-centering chuck and fewer working parts, make HyKon still the best buy. Operates much easier and is from 2 to 5 times faster than any chain machine.

One easy pull of the strap revolves the bit five times. Four easy strokes send the bit through the toughest joist. No bit breakage. Bores on a dead level so wire can be pulled through for 100 feet. Time and labor savings on one or two jobs pay for the machine. Guaranteed to stand up under the hardest use. Telescopic adjustment in a moment from 4½ to 13½ feet. Finished in durable black enamel. Weight packed, 20 lbs.

Description	Price Each
HyKon Boring Device, incuding one 11/16-inch Fast Boring Bit	$38.50
Universal Attachment	4.25
Old House Wiring Attachment	6.50

EKLIND HEX-UNI-KEY

6-IN-1 WRENCH FOR SOCKET SCREWS



Handy tool for pocket, bench or tool kit. All the wrenches for six most popular size socket screws in one handy tool. Wrenches hardened, tempered and tested for durability in use.

Fits set screws from No. 8 to 7/16-inch; cap screws from No. 4 to 5/16-inch. All wrenches have deformed ends cast in a holder to prevent loosening with hard usage.

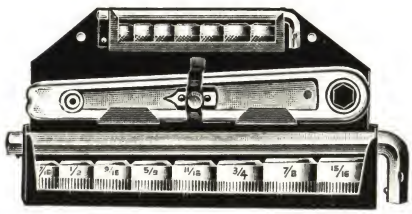
A Universal Socket Screw Wrench for: mechanics, tool makers, refrigeration repairs, electricians, radio repair, home workshops.

Available with six Hex-Uni-Keys mounted on an attractive merchandising card for easy display; also, available with single key mounted on individual display card.

Price, Hex-Uni-Keys ..... each $1.00

"NONE BETTER" CARBON SOCKET SETS

No. 1219 19-PIECE SET

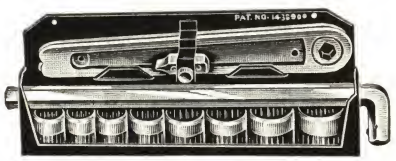


This set has the double attraction of a complete ½" hex drive assortment of sockets and tools and the time and labor saving Midget outfit, covering a wide range of work more easily and effectively. There are eight 12 point heat treated sockets, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 7/8 and 15/16 inch. A Ratchet and Screw Driver Adapter and an Ell Handle. All ½-inch Hex Drive.

There are also seven Midget sockets, ¼, 5/16, 11/32, 3/8, 7/16, ½ and an internal knurled socket, with a 5-inch long Ell Handle. These have a ¼-inch Hex Drive. All sockets and parts have a bright cadmium finish and are securely packed in a red enameled steel Display Container.

Shipping weight, 3½ lbs. each. Standard package, 50.

No. 1802D 11-PIECE SET



An eight socket set with a ratchet handle. To this has been added all the attractive appearance of the "None Better" Display Container. When the Ell Handle is withdrawn the sockets are in an open tray from which the desired size may readily be selected. This set is made up of eight 12 point heat treated sockets, 7/16, ½, 9/16, 5/8, 11/16, 3/4, 7/8 and 15/16-inch, an Ell Handle, a Ratchet and Screw Driver Adapter. All parts ½-inch Hex Drive and all bright cadmium finished. Packed in red enamel finished Display Container.

Shipping weight, 2½ lbs. each. Standard package, 50.

No. 791 8-PIECE SET



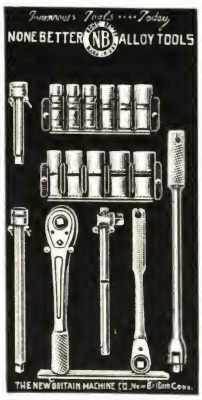
The strung on feature makes the most compact way possible to pack a socket set. There are seven 12 point broached heat treated sockets, 7/16, ½, 9/16, 5/8, 11/16, 3/4 and 7/8-inch on the Ell Handle. Sockets and Ell Handle are ½-inch Hex Drive and finished in bright cadmium.

Shipping weight, 1½ lbs. each. Standard package, 50.

NOTE: With the exception of Set No. 791, the socket sets are all made up in handle lock containers assuring perfect security and convenience. The handle passing through openings in the end of the container securely locks sockets and other parts in box. By simply withdrawing the handle, the sockets are readily available in an open tray.

"NONE BETTER" WRENCH DISPLAY PANELS

No. 6250 WRENCH DISPLAY



½-Inch Square Drive — 38 Pieces. A handsome balanced ½-inch drive collection on a sturdy, lightweight 1 x 2 foot display, finished in deep green.

Comes complete in one shipping carton. Wt. 24 lbs.

Cat. No.	Each	Size In.
T 1214	2	7/16
T 1216	2	½
T 1218	2	9/16
T 1219	2	19/32
T 1220	2	5/8
T 1222	2	11/16
T 1224	2	¾
T 1226	2	13/16
T 1228	2	7/8
T 1230	2	15/16
T 1232	2	1

Drive Parts

Cat. No.	Each	Description
S 24	2	5-Inch Socket Extension
S 25	2	10-Inch Socket Extension
S 30	2	8-Inch Cross Bar
S 35	2	Short Adapter
S 41	2	Reversible Ratchet
S 45	2	Standard Ratchet
S 53	2	15-Inch Flex Handle
S 70	2	Slide Tee Handle

No. 6255-H WRENCH DISPLAY



45° Box End Wrenches—37 pieces. Board is lightweight and sturdy, 1 x 2-foot. Finished in deep green. Comes complete in one shipping container. Weight, 18 lbs.

45° Long

Cat. No.	Each	Size In.
8723-H	5	3/8 x 7/16
8725B-H	5	½ x 9/16
8028A-H	5	5/8 x 11/16
8729A-H	5	¾ x 25/32
8731B-H	3	13/16 x 7/8
8033C-H	3	15/16 x 1

45° Short

9723-H	3	3/8 x 7/16
9725B-H	5	½ x 9/16
9727A-H	3	5/8 x 11/16

No. 6252-H WRENCH DISPLAY

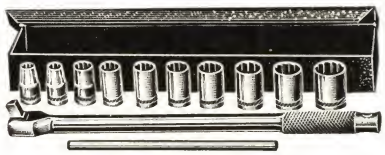


Engineer's Wrenches — 47 pieces. Board is 1 x 2 foot, light and sturdy. Finished in deep green. Complete in one shipping carton. Weight 21 pounds.

Cat. No.	Each	Size In.
1020-H	3	¼ x 5/16
1721-H	3	5/16 x 3/8
1723-H	5	3/8 x 7/16
1725-H	4	7/16 x ½
1725-B-H	5	½ x 9/16
1727-H	4	9/16 x 5/8
1027-H	4	19/32 x 11/16
1729-H	5	5/8 x ¾
1029-H	2	11/16 x 25/32
1731-H	2	¾ x 13/16
1031-B-H	3	25/32 x 13/16
1731-A-H	3	¾ x 7/8
1733-A-H	2	7/8 x 15/16
1033-C-H	2	15/16 x 1

"NONE BETTER" FORGED WRENCH AND SOCKET SETS

No. 6012 12-PIECE ½-INCH SQUARE DRIVE SET



12 Point Sockets

Cat. No.	Size In.	Cat. No.	Size In.
T 1214	7/16	T 1222	11/16
T 1216	1/2	T 1224	3/4
T 1218	9/16	T 1226	13/16
T 1220	5/8	T 1228	7/8
T 1221	21/32	T 1230	15/16

Drive Parts

Cat. No.	Description
S 53	15-Inch Flex Handle
S 30	8-Inch Cross Bar
13266	Metal Box (15 x 2¾ x 1½ inches)

Shipping weight, 5 lbs.

No. 6034T 34-PIECE ½ & ¼-INCH SQUARE DRIVE SET



½-Inch Square Drive 12 Point Sockets

Cat. No.	Size In.	Cat. No.	Size In.
T 1214	7/16	T 1225	25/32
T 1216	1/2	T 1226	13/16
T 1218	9/16	T 1228	7/8
T 1219	19/32	T 1230	15/16
T 1220	5/8	T 1231	31/32
T 1221	21/32	T 1232	1
T 1222	11/16	T 1234	1 1/16
T 1224	3/4	T 1236	1 1/8

Drive Parts

Cat. No.	Description	Cat. No.	Description
S 41	Rev. Ratchet	S 54	18" Flex. Handle
S 30	8" Cross Bar	S 85	19" Speeder
S 70	Slide T Handle	S 24	5" Socket Ext.
S 25	10" Socket Ext.		

¼-Inch Square Drive 6 Point Sockets

Cat. No.	Size In.	Cat. No.	Size In.
M 608	1/4	M 611	11/32
M 609	9/32	M 612	3/8
M 610	5/16	M 614	7/16

¼ Inch Square Drive 8 Point Sockets

M 808	1/4	M 812	3/8
M 810	5/16		

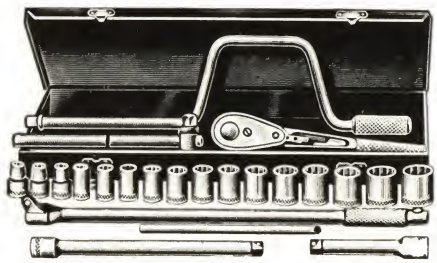
Drive Parts

Cat. No.	Description
M 50	6-Inch Flex Handle
M 30	3-Inch Cross Bar
13265	Metal Box (7 x 2½ x 1½ inches)
13263	Metal Box w/tray (19 x 6 x 6 inches)

Shipping weight, 22 lbs.

"NONE BETTER" FORGED WRENCH AND SOCKET SETS

No. 6023 23-PIECE ½-INCH SQUARE DRIVE SET



12 Point Sockets

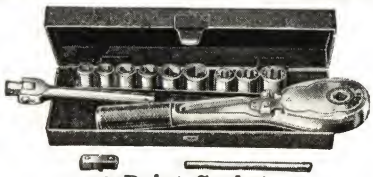
Cat. No.	Size Inches	Cat. No.	Size Inches	Cat. No.	Size Inches
T 1214	7/16	T 1222	11/16	T 1230	15/16
T 1216	1/2	T 1224	3/4	T 1231	31/32
T 1218	9/16	T 1225	25/32	T 1232	1
T 1219	19/32	T 1226	13/16	T 1234	1 1/16
T 1220	5/8	T 1228	7/8	T 1236	1 1/8
T 1221	21/32				

Drive Parts

Cat. No.	Description	Cat. No.	Description
S 41	Reversible Ratchet	S 70	Slide Tee Handle
S 54	18" Flex Handle	S 24	5" Socket Ext.
S 30	8" Cross Bar	S 25	10" Socket Ext.
S 85	19" Speeder	14305	Metal Box (19x7½x2")

Shipping weight, 17 lbs.

No. 601 12-PIECE ¼-INCH DRIVE SET



6 Point Sockets

Cat. No.	Size In.	Cat. No.	Size In.
M 608	1/4	M 611	11/32
M 609	9/32	M 612	3/8
M 610	5/16	M 614	7/16

8 Point Sockets

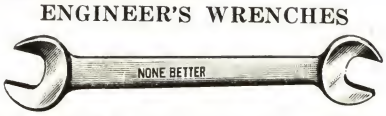
M 808	1/4	M 812	3/8
M 810	5/16		

Drive Parts

Cat. No.	Description	Cat. No.	Description
M 41	Rev. Ratchet	M 50	6" Flex Handle
M 30	3" Cross Bar	13265	Metal Box (7 x 2½ x 1½")

Shipping weight, 2 lbs.

ENGINEER'S WRENCHES



No. 1020-H ¼x5/16-inch to No. 1033C-H 15/16x1-inch openings.

45° LONG BOX END WRENCHES



No. 8723-H 3/8x7/16-inch to No. 8033C-H 1 1/8x1-inch openings.

45° SHORT BOX END WRENCHES



No. 9723-H 3/8x7/16-inch to No. 9727A-H 5/8x11/16-inch openings.

"NONE BETTER" STRAIGHT THIN WALL SOCKETS

½-INCH SQUARE DRIVE



12 Point



8 Point

The Straight Thin Wall line of sockets in the "None Better" tool line is one that we can recommend with pride; one that you can sell with pleasure and profit; and one that your customers can use with safety and satisfaction. Thoroughly heat treated and hardened, they will wear indefinitely.

12 Point Sockets

Cat. No.	Size In.	Ship. Wt. Oz.
T-1214	7/16	3
T-1216	1/2	3
T-1218	9/16	3
T-1219	19/32	3
T-1220	5/8	3
T-1221	21/32	3
T-1222	11/16	3
T-1224	3/4	4
T-1225	25/32	4
T-1226	13/16	4
T-1228	7/8	5
T-1230	15/16	5
T-1231	31/32	6
T-1232	1	6
T-1234	1 1/16	7
T-1236	1 1/8	8
T-1240	1 1/4	9

8 Point Sockets

Cat. No.	Size In.	Ship. Wt. Oz.
T-812	3/8	3
T-814	7/16	3
T-816	1/2	3
T-818	9/16	3
T-820	5/8	4
T-822	11/16	4
T-824	3/4	4
T-826	13/16	5
T-828	7/8	6

"NONE BETTER" DRIVE PARTS AND SOCKET ATTACHMENTS

FLEX HANDLES



The "None Better" Flex Handles may be used as an extension, an offset handle, a nut spinner or with the cross bar as a Tee Handle. There are three lengths, 12, 15 and 18-inch to give the desired leverage, and the flexible head allows them to be used at many angles.

Cat. No.	Description	Ship. Wt. Lbs.
S-54	18-Inch Flex Handle	2¼
S-53	15-Inch Flex Handle	2
S-52	12-Inch Flex Handle	1¾

FLEX HANDLE CROSS BAR

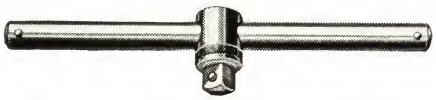


The combination of the cross bar makes any Flex Handle a high grade Tee Handle at little cost.

Cat. No.	Description	Ship. Wt. Oz.
S-30	8-Inch Cross Bar	5

"NONE BETTER" DRIVE PARTS AND SOCKET ATTACHMENTS

SLIDE TEE HANDLE



Any of a variety of combinations can be made with the Slide Tee Handle.

Cat. No.	Description	Ship. Wt. Lbs.
S-70	Slide Tee Handle	1

No. S-41 REVERSIBLE RATCHET



This Reversible Ratchet is the result of a long and careful study of the requirements of such a tool. It is stronger, easier to handle and more efficient. The double tooth engagement of the ratchet gear with the pawl gives greater strength and longer life. The action can be instantly reversed by a slight thumb pressure. All parts are made of selected S.A.E. Alloy Steel.

No. Cat.	Description	Lbs. Ship. Wt.
S-41	Reversible Ratchet	1

No. S-45 STANDARD RATCHET



The Standard Ratchet is dependable and efficient. A drop forged handle that will withstand severe use. Gear and pawls made from Alloy Steel and carefully heat treated.

Cat. No.	Description	Ship. Wt. Lbs.
S-45	Standard Ratchet	1¾

No. S-35 SHORT ADAPTER



Connecting link between Standard Ratchet and Socket.

Cat. No.	Description	Ship. Wt. Oz.
S-35	Short Adapter	1

SOCKET EXTENSIONS



Three socket extensions in lengths from 5 to 20 inches with male and female ends. The exact fit of these parts makes a rigid individual tool when used in connection with ratchet or other handles.

Cat. No.	Description	Ship. Wt.
S-24	5-Inch Socket Extension	9 oz.
S-25	10-Inch Socket Extension	1 lb. 2 oz.
S-28	20-Inch Socket Extension	2 lbs.

CYCLO-CORE CARBIDE-TIPPED ROTARY DRILL BIT

With Cyclo-Center Attachment





Drill **Concrete** with Cyclo-Core carbide-tipped rotary drill bit. Each carbide cutting edge has a machined-in spiral thread running the length of the body — from tip to shank — which acts as an automatic runway that positively removes dust as it drills.

Cutting diameter of the carbide tips is the same as full diameter of body — giving maximum strength in all sizes.

For precision locating and starting large holes in concrete, vitreous tile or hard masonry, use the Cyclo-Center Attachment.

Cyclo-Core Rotary Drill Bit				Locating Attachment	
Drill Size In.	Shank Diam. In.	Overall Length In.	Price Each	No.	Price Each
¾	½	8	**$9.80**	RC ¾"	**$3.50**
⅞	½	8	**14.80**	RC ⅞"	**3.95**
1	½	10	**15.80**	RC 1"	**4.35**
1⅛	½	10	**24.92**	RC 1⅛"	**6.30**
1¼	½	12	**27.72**	RC 1¼"	**6.92**
1⅜	½	12	**30.80**	RC 1⅜"	**7.70**
1½	½	12	**34.72**	RC 1½"	**8.74**
1⅝	½	12	**36.40**	RC 1⅝"	**9.10**
1¾	½	12	**37.80**	RC 1¾"	**9.44**
1⅞	½	12	**39.20**	RC 1⅞"	**9.80**
2	¾	12	**41.72**	RC 2	**10.42**

CYCLO-TWIST CARBIDE-TIPPED MASONRY DRILL BIT



Positively removes dust as it drills, from carbide tip to mouth of the hole. Two machined-in spiral threads running the length of the body — one for each cutting edge — make automatic runways for all dust and cuttings from the bottom of the hole. Diameter of carbide tip is the same as full diameter of body — giving maximum strength in all sizes.

Nominal Diam.	Shank	Overall Length In.	Minimum Actual Drill Diam.	Std. Pkg.	Ship. Wt. Std. Pkg.	Price Each
3/16		3	.197	12	6 oz.	**$1.98**
¼	For	4	.260	12	12 oz.	**1.98**
5/16	¼ In.	4	.327	12	14 oz.	**2.15**
⅜	Chuck	4	.390	12	1⅛ lb.	**2.37**
7/16**		6	.457	12	2½ lb.	**2.64**
½**		6	.525	12	3⅛ lb.	**2.97**
9/16	For	6	.587	6	2 lb.	**3.30**
⅝	½ In.	6	.650	6	2⅝ lb.	**3.63**
11/16	Chuck	6	.712	6	2⅞ lb.	**4.13**
¾		6	.775	6	3¼ lb.	**4.62**
⅞		6	.905	6	4 lb.	**5.61**
1		6	1.030	6	5 lb.	**7.92**

Other special diameters. Also extra lengths to 36 inches long.

*Sufficient oversize allowances are provided for proper hole size required for expansion shields, anchors and toggle bolts.

**Available for ¼ inch chuck upon request.

THUNDERBOLT CARBIDE-TIPPED HAMMER BITS

For Electric or Pneumatic Hammers



For drilling clean, accurate, uniform holes in **Granite** or **Hard Concrete.** Tip is a special grade of carbide that withstands shock and wear. Expertly brazed to specially heat-treated steel alloy shank.

Taper is meticulously proportioned to withstand crystalization while drilling hundreds of holes.

Bit Diameter In.	Overall Length Inches	Std. Pkg.	Std. Pkg. Wt. Oz.	Price Each
	No. 2 Taper			
3/16	3	12	12½	**$5.39**
¼	4	12	13	**5.39**
5/16	4	12	17½	**5.89**
⅜	4	12	18	**6.44**
7/16	6	12	25½	**7.65**
	No. 3 Taper			
½	6	6	26½	**8.75**
9/16	6	6	29	**9.35**
⅝	6	6	29½	**9.74**
¾	6	3	22	**14.03**
⅞	6	3	24	**15.95**
1	6	3	26	**18.48**
1⅛	6	1	8	**19.80**
1¼	6	1	10	**23.10**

CHUCK WRENCH SPECIFICATIONS

Make of Hammer	Hammer No.	No. 2 Taper Chuck Wrench No.	No. 2 Taper Chuck Wrench Price*	No. 3 Taper Chuck Wrench No.	No. 3 Taper Chuck Wrench Price*
Black & Decker or Van Dorn	30	2B	**$5.78**	3B	**$6.55**
	32	Not		3B	**6.55**
	34	Recommended		3D	**6.55**
Thor	4-100	Not Recommended		3C	**6.55**
Syntron or Millers Falls	MK-8	2S	**5.78**	3S	**6.55**
	or 1058	2S	**5.78**	3S	**6.55**
	16 or 1716			3N	**6.55**
	22 or 2516A	Not Recommended		3N	**6.55**
	25 or 3216A			3N	**6.55**
				3N	**6.55**
Stanley	310	2Y	**5.78**	3Y	**6.55**
	310A	2Y	**5.78**	3Y	**6.55**
	320	Not		3Z	**6.55**
	320A	Recommended		3Z	**6.55**
Chicago Pneumatic	840	2C	**5.78**	3C	**6.55**
	930	Not Recommended		3PD	**6.55**
Phillips	2-2A	2A	**5.78**	3A	**6.55**
	4-4A	Not Recommended		3K	**6.55**
Master	1R	Not Recommended		3D	**6.55**
Cleco Handi Drill	.....	2CL	**5.78**	3CL	**6.55**
Milwaukee Electric	H-56-X	2M	**5.78**	SM	**6.55**
Any Standard Pneumatic Chipping Hammer	.....	Not Recommended		3PN	**6.55**
Ingersoll Rand	J-10	Not Recommended		3J	**8.25**
Chicago Pneumatic	CP-14	Not Recommended		3J	**8.25**

*Price includes Chuck, Turning Handle, Rubber Sleeve, Drift Pin.

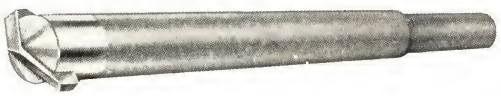
No. 2 Taper—Bit Diameter 3/16 to 7/16 inch incl.

No. 3 Taper—Bit Diameter ½ to 1¼ inch incl.

Any hammer not listed, please advise make and size of hammer. Chuck will be furnished to fit.

DIAMOND ROTARY DIAMIDE DRILLS

FOR ROTARY DRILLING OF MASONRY



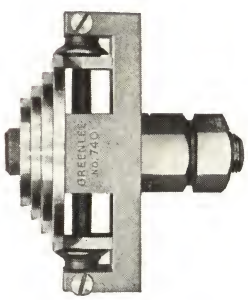
For easier, quicker drilling of concrete, brick, slate, marble, plaster, glazed tile and other non-metallic construction material.

Cat. No.	Drill Diam.	Shank Diam.	Overall Length	Std. Pkg.	Price Each
	For Use with ¼-Inch Capacity Drill				
DK3	3/16	¼	4	12	$1.40
DK4	¼	3/16	5	12	1.40
DK5	5/16	¼	5	12	1.50
DK6	⅜	¼	5	12	1.60
DK7	7/16	¼	6	12	1.85
DK8	½	¼	6	12	2.05
DK9	9/16	¼	6	12	2.30
	For Use with ½-Inch Heavy Duty Drill				
DK8A	½-A	½	8	12	2.05
DK10	5/8	½	8	6	2.45
DK11	11/16	½	8	6	2.95
DK12	¾	½	8	6	3.15
DK13	13/16	½	8	6	4.25
DK14	⅞	½	8	6	4.60
DK16	1	½	10	6	6.30
DK18	1⅛	½	10	6	7.85
DK20	1¼	½	10	6	9.35
DK24	1½	½	10	6	11.60

Any rotary type of drill can be used to operate Diamide Drills, and they will perform satisfactorily at speeds normally attainable in such equipment.

GREENLEE KNOCKOUT TOOLS

NO. 740 KNOCKOUT CUTTER



Greenlee Knockout Cutters enlarge holes up to 3½ inches in diameter. Will cut through metal up to 10 gauge or ⅛-inch thickness in 1½ minutes or less per hole. The hole is left clean and round, requiring no filing to smooth off the edges.

Operation is simple. The cutting is done by the feed and drive action of two-wheel cutters.

Knockout Cutter

Cat. No.	Description	Price Each
740	For 1½", 2", 2½", and 3" Conduit	$15.00

Extra Parts

AV323	Lock Screws (2)	.30
AV324	Wheel Cutters (2)	.50
AV325	Feed Nut	.20
AV326	Disc 1 13/16" for 1½" Conduit	.70
AV2021	Disc 2⅜" for 2 " Conduit	.80
AV2022	Disc 2⅞" for 2½" Conduit	1.00
AV2023	Disc 3½" for 3 " Conduit	1.20
AV327	Body	5.00
AV328	Shaft	.80
AV329	Drive Nut	.80
AV330	Retainer Screws (2)	.45
AV331	Cutter Bushings (2)	.25
AV332	Cutter Supports (2)	.65
AV333	Key Washer	.25
AV334	No. 7 Woodruff Key	.05

GREENLEE KNOCKOUT TOOLS

NO. 735 KNOCKOUT PUNCH SET



No. 735

This set is furnished with a leather case in which the punches are regularly packed. The set consists of 4 punches for cutting ⅞, 1 3/32, 1 11/32, 1 11/16-inch holes for ½, ¾, 1, and 1¼-inch conduit.

Improved Drive for ½-Inch Punch

To increase the length of service of the ½-inch Punch in cutting ⅞-inch holes in the heavier-gauge sheet metals, the No. 1387AV Drive Screw and No. 1388AV Drive Nut are available. These fit the standard No. AV121 Punch and No. AV122 Die for ½-inch conduit, as furnished with the No. 735 Set, and they take the place of No. AV322 ⅜-inch Cap Screw.

NO. 737 KNOCKOUT PUNCH SET

This set is packed in a leather case, similar to No. 735, but it consists of only two punches for cutting 1 13/16 and 2⅜-inch holes to take 1½ and 2-inch conduit.

KNOCKOUT PUNCHES

By adding these punches to Nos. 735 and 737 Sets, enlargements can be made for all sizes of conduit from ½ to 4-inch inclusive. No. 738 cuts a 2⅞-inch hole for 2½-inch conduit. No. 739 cuts a 3½-inch hole for 3-inch conduit, No. 741 cuts a 4-inch hole for 3½-inch conduit, and No. 742 cuts a 4½-inch hole for 4-inch conduit.



No. 738

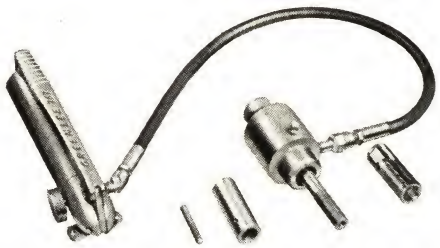
Cat. No.	Description	Price
735	Knockout Punch Set for ½, ¾, 1, and 1¼-inch conduit	$10.00
.....	Improved Drive for ½-inch Punch	1.10
737	Knockout Punch Set for 1½ and 2-inch conduit	10.00
738	Knockout Punch for 2½-inch conduit	14.00
739	Knockout Punch for 3- inch conduit	19.00
741	Knockout Punch for 3½-inch conduit	39.00
742	Knockout Punch for 4- inch conduit	48.00

Extra Parts

No. 735 Knockout Punch Set		
	AV121—Punch for ½" Conduit	$1.25
	AV122—Die for ½" Conduit	.65
	AV123—Punch for ¾" Conduit	1.45
	AV124—Die for ¾" Conduit	.80
	AV125—Punch for 1" Conduit	1.65
	AV126—Die for 1" Conduit	.95
	AV127—Punch for 1¼" Conduit	1.90
	AV128—Die for 1¼" Conduit	1.05
	AV322—⅜" x 1¾" Cap Screw	.25
	AV249—¾" x 2⅞" Cap Screw	.35
Improved Drive for ½" Punch		
	1387AV—Drive Screw	.75
	1388AV—Drive Nut	.35
No. 737 Knockout Punch Set		
	AV439—Punch for 1½" Conduit	2.30
	AV440—Die for 1½" Conduit	2.00
	AV441—Punch for 2" Conduit	3.20
	AV442—Die for 2" Conduit	2.50
	AV304—¾" x 3½" Cap Screw	.50
No. 738 Knockout Punch		
	AV1429—Punch for 2½" Conduit	5.40
	AV1430—Die for 2½" Conduit	5.00
	AV1433—Drive Nut	1.35
	AV1434—Drive Screw	2.75
No. 739 Knockout Punch		
	AV1431—Punch for 3" Conduit	8.00
	AV1432—Die for 3" Conduit	7.50
	AV1433—Drive Nut	1.35
	AV1434—Drive Screw	2.75
No. 741 and No. 742 Knockout Punches		
	AV2981—Die for 3½" Conduit	14.00
	AV2982—Punch for 3½" Conduit	18.00
	AV2983—Die for 4" Conduit	18.00
	AV2984—Punch for 4" Conduit	24.00
	AV3026—Drive Screw (for both punches)	6.00
	AV3036—Drive Nut (for both punches)	2.50
	AV3037—Bushing (for both punches)	2.25

GREENLEE KNOCKOUT TOOLS

No. 7646 HYDRARAM KNOCKOUT PUNCH DRIVER



An efficient, portable hydraulic unit specifically designed for driving standard Greenlee Knockout Punches. Developing over eleven tons ram pressure, conduit holes are cut in 10-gauge metal with ease. Cutting holes in tight places is easier, too, for no wrench space is needed.

Cat. No.	Description	Wt. Lbs. Each	Price Each
7646	HydraRam complete	20	**$86.50**
767	Hand Hydraulic Pump	5⅛	**30.00**
746	Ram	5⅝	**49.00**
921-GB	High-pressure Hose	1⅝	**6.00**
AA1614	⅜-inch Adapter Screw	1 oz.	**.50**
AA1615	Die Sleeve	12½ oz.	**1.00**

BERNZ PORTABLE LP* GAS TORCH

With the "Refill Feature"



Get instant lighting without preheating with the Bernz LP* Gas Torch—only completely portable "cartridge refill" torch made. Handy to use anywhere, due to its small diameter and light weight. No cumbersome hose connections or extra tanks. Burns in any position, reaching calculated temperature of 3660 degrees F.

Economical refill cartridge can be attached in a few seconds, lasts up to 12 hours.

Detect non-combustible leaks in three short steps: (1) Light burner and adjust flame. (2) Pass open end of detector hose near suspected leak. (3) In case of leak, gas enters hose and flame changes color. With detector hose unscrewed, torch may be operated as pencil flame burner. Detector hose quickly removable when not in use.

ICC-4B240 approved. Torch comes fully loaded, weighs less than 2½ lbs. Cylinder is 2¼ inches in diameter, 11¼ inches over-all. Finished in metallic blue.

Price, **LP-701** Cylinder and Pencil Flame Burner Unit .....$.....
LP-703 Cylinder plus Combination Unit: Non-Combustible Gas Leak Detector and Pencil Flame Burner....$.....

*Liquefied Petroleum (Propane)

LENK BLOW TORCHES



HI-HEAT BLOTORCHES

Heavy duty blotorches, featuring flame control and shut-off valve. Tank has funnel shaped bottom for easy filling. Flame 2000° Fahr. No. 105 designed to use alcohol as fuel; No. 104 to use gasoline.

Packed in individual cartons.

Cat. No.	Description	Cap. Pint	Size Inches	Wt. Lbs. Per Doz.	Price Each
105	Alcohol	¾	7½x3	10	**$4.00**
104	Gasoline	¾	7½x3	10	**4.00**

LENK MOUTH-BLOW TYPE BLOTORCHES

Wick is encased in special tube to prevent boiling over of fuel. No. 40 is a heavy duty type. A life-time torch.



Cat. No.	Size Inches	Carton	Wt. Lbs. Per Doz.	Price Each
20	6⅞x2¾	1	7	**$4.50**
40	7⅞x2½	1	22	**5.00**



LENK CHAMPION ALCOHOL BLOTORCH

Blows itself. Operates about three hours on one filling. Blast 1700° F. Sturdy construction and built to last a lifetime. Made of brass. All parts interchangeable.

Cat. No.	Size Inches	Carton	Wt. Lbs. Per Doz.	Price Each
30	7x4¾x2	1	7	**$5.00**

LENK DUO-DUTY ALCOHOL BLOTORCH

Has double burner, one for needle-point flame—add the attachment for a heavy intense flame. A cleaning pin is kept in top filler plug. Full-grip handle, always cool. Filter screen in jet prevents plugging of orifice. Practical for fusing large terminal lugs and heavy duty soldering jobs.



Cat. No.	Size Inches	Carton	Shpg. Wt. Lbs.	Price Each
350	7⅛x4¾x2½	1	2	**$5.50**



LENK IMPROVED ALCOHOL TORCH

Fills from the top and has a solid base.

Mechanically leakproof. Blows itself. Flame heat 1600°.

Packed one to carton.

Cat. No.	Size Inches	Wt. Lbs. Per Doz.	Price Each
108	5½x2⅛x1	4	**$2.00**

LENK BLOW TORCHES

LENK SUPERHEAT BLOTORCH



MODEL No. 222 ALCOHOL BLOTORCH

For professional and home use. Improved technical design. Generates over 2700 degrees (Fahrenheit). Does light brazing and silver soldering. Operates at any angle. Gun-Grip handle — cool, convenient. Has windshield for outdoor use. Chrome finish. Burns one hour.

Packed in individual display carton. Shipping weight, 15 lbs. per dozen. Size 8 x 6 inches.

Price, Model No. **222** Alcohol Blotorch..each **$5.50**

LENK PERFECT TORCH FUEL

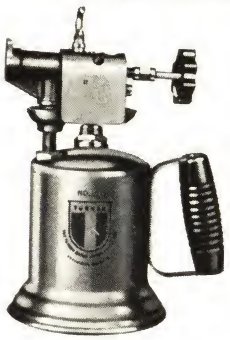


A scientifically compounded fuel for efficient operation of alcohol torches. A clean fuel that prevents clogging of orifice. No sediment in fuel prevents carbon. No obnoxious fumes. Keeps wicks of torch in good condition. Eliminates corrosion and insures satisfactory results.

Price, 32-ounce can.....**$1.80**

TURNER BLOW TORCHES

No. 150 BLOW TORCH—QUART-SIZE



Home craftsmen, farmers, tinkerers and others who find a blow torch to be a "friend in need" appreciate this lowest-price Turner Torch. The No. 150 is not a "stripped" or "competitive" model. The powerful, blow-proof pump is removable for filling. Inclined, comfortable handle with cast bronze brackets; massive, efficient cast bronze burner; lead terne plate steel coated tank.

Price, No. **150** (quart size).....each **$8.60**

HALF-PINT, SELF-PRESSURE TORCH

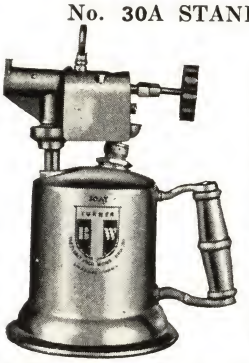


Ideal for hobbyists and home craftsmen. Complete with soldering iron rest and wind shield. High-polished brass tank is 3½ inches diameter to assure stability — holds 7½ oz. of fuel. Burns 3½ hours full open. Pressure is maintained by brass wire which conducts heat to tank. Bottom is concave to facilitate filling. No. 59 burns gasoline. No. 60 burns alcohol.

Price, No. **59** ½-Pint (Gasoline) .....each **$4.60**
No. **60** ½-Pint (Alcohol) .....each **4.60**

TURNER BLOW TORCHES

No. 30A STANDARD BLOW TORCH



An unusually fine low-priced blow torch for mechanics, repairmen, etc. Heavy improved burner develops an extremely hot blue flame and will give highly efficient service. Enlargement of orifice prevented by new type needle valve. Sturdy and efficient pump. Highly polished brass tank, Top-Fill. Gasoline fuel. Shipping weight 4½ lbs.

Price, No. **30A** (quart size) .....each **$9.90**
No. **25A** (pint size) .....each **9.90**
No. **27** (quart, bottom fill).....each **10.60**

NO. 206A BLOW TORCH



Powerful torch for professional users. Heavy improved burner develops high heat and gives superior performance in any weather. Automatic cleaning needle and jet-block may be easily replaced after long wear. Cool composition valve wheel. Highly polished seamless brass tank with trouble-free pump. Gasoline fuel.

Price, No. **206A** (quart size).....each **$12.10**

NO. 39A BLOW TORCH



Super torch for professional users. Develops large blue flame and operates perfectly in any weather. Sturdy construction. Wire cleaning needle and orifice block easily replaced after years of wear. Perfect combustion obtained from adjustable air syphoning tube. Drip cup conveniently filled through lower priming valve. Highly polished brass tank with trouble-free pump. Gasoline fuel.

Price, No. **39A** (quart size).....each **$15.75**

No. 92A BLOW TORCH—QUART-SIZE



Experienced precision workers in the factory and laboratory and on particular sweating and copper-fitting jobs insist on the Turner Double Jet burner of the 92A. Both jets function to produce a soot-free, pencil point "flame-within-a-flame" of terrific intensity, hot enough for light brazing. When idling, the lower jet produces a noiseless "lazy" flame that keeps the torch generated for instant action. For gasoline.

Price, No. **92A** (quart size) .....each **$18.30**
No. **95A** (pint size) .....each **18.30**

KENNEDY ALL-STEEL TOOL KITS

NO. 520 MACHINISTS' CASE



Drawer slides work easily and are very strong. Front panel, which slides under drawers when box is open, fits against drawers, locking them with lid lock. Rust resisting fittings, felt-lined drawers. Seal brown ripple baked enamel finish. Adjustable partition in each drawer, except bottom one.

Inside Dimensions in Inches

Till in top 20 x8⅜x3¾
Four drawers 8⅝x7½x1
One drawer 18¼x7½x1½
One drawer 8⅝x7½x2
One drawer 18¼x7½x2½

Cat. No.	Dimens., Inches Long	Wide	High	Net Wt.Lbs.	Shpg. Wt.Lbs.	Price Each
520	20	8½	13	27¾	35	**$25.00**

NO. 620 MACHINISTS' CASE



Drawers slide easily on super-compound slides that stop only after they are extended, giving a clear view of the contents. Front panel, which slides under drawers when box is open, fits against drawers locking them with lid lock. Rust resisting fittings; dark green ripple baked enamel finish; soft felt-like finish inside of drawers.

Inside Dimensions in Inches

Till in top 20 x8⅜x3¼
Top drawer (divided in 2 sections) .... 18¼x7½x1$\frac{15}{16}$
Middle drawer 18¼x7½x2⅜
Lowest drawer 18¼x7½x3¼

Cat. No.	Dimens., Inches Long	Wide	High	Net Wt.Lbs.	Shpg. Wt.Lbs.	Price Each
620	20	8½	13	26	33	**$20.00**

KENNEDY ALL-STEEL TOOL KITS

GENERAL MECHANIC'S KIT



Three skid rails are welded to the bottom of the box for added strength and protection. Finished in seal brown ripple baked enamel outside and dark green smooth baked enamel interior. Leather handle, fastened with draw bolt hasp and staple.

Cat. No.	Dimens., Inches Long	Wide	High	Net Wt.Lbs.	Shpg. Wt.Lbs.	Price Each
1018	18	10	12½	17½	20	**$12.50**

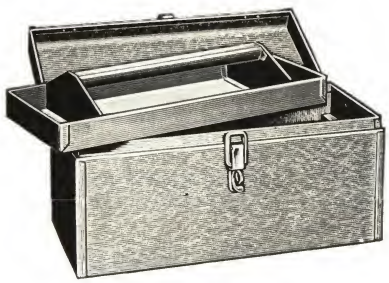
BIGHORN LINE TOOL BOXES



Double seam ends, full length piano hinge, and corner irons feature this solidly constructed box. Marproof green, baked ripple enamel finish. CS16 and CS19 have cantilever swing tray. Fastened with draw bolt hasp and staple.

Cat. No.	Dimens., Inches Long	Wide	High	Carton	Shpg. Wt.Lbs.	Price Each
CS16	16	7	7	6	42	**$4.90**
CS19	19	7	7	6	47	**5.10**

K-20 TOOL KIT



A convenient all-purpose tool kit with divided carrying tray. Equally handy for shop or home use. Tray has three separate compartments for tools or small parts and is divided as follows: one compartment 13⅞x7⅞ inches; 2 compartments 2¾x7⅞ inches. Tray is 19⅜x7⅞x1¾ inches high. A piano-type hinge extends the full length of the lid and the box is locked by means of a draw bolt hasp and staple. Dark green ripple baked enamel finish.

Cat. No.	Dimens., Inches Long	Wide	High	Carton	Shpg. Wt.Lbs.	Price Each
K-20	20	8½	9½	4	57	**$7.50**

HAMILTON TOOL BOXES

No. 21-1 CLIMAX INDUSTRIAL BOX

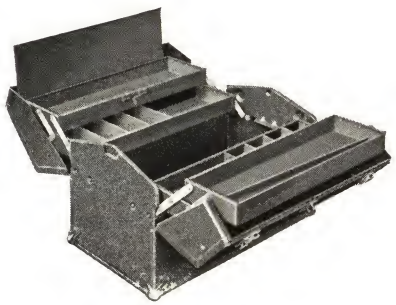


Made of heavy gauge steel — all joints double seamed and spot welded. Corner reinforcements omitted on this box. Full size automatic tray, with suitable partitions. Tray rests on steel shelves when box is closed. Comfortable form-fitting handle made of steel. Nickel plated side catches. Staple and hasp for padlock.

Finished inside and out in attractive baked gray satin enamel finish. 16 in. long x 7 in. high x 7 in. wide. Packed 6 to a shipping carton. Weight, 35 lbs.

Price, No. **21-1** Industrial Tool Box.....each **$5.70**

No. 18-4 CLIMAX INDUSTRIAL TOOL BOX



Made of heavy gauge steel, corners reinforced. Combination lock seam and spot weld. Trays scientifically fitted with permanent divisions. Some tapered for socket sets. Comfortable form-fitting handle. Super heavy side catches. Staple and hasp for padlock. End panels conveniently low. Inside and outside of box beautifully finished in baked gray wrinkle enamel. 18 in. long x 12½ in. high x 10 in. wide.

Packed individually in shipping carton. Weight, 17 lbs.

Price, No. **18-4** Industrial Tool Box....each **$11.80**

HAMILTON TOOL AND TACKLE BOXES

No. 14-2 TOOL AND TACKLE BOX



Big size, strong, good-looking. Trays automatically swing upward and out of the way. Positively tip-proof. Round corners, nickel-plated hardware, patentd comfort grip handle provides place for identification card, strong lock and side catches. Box finished in baked durable gray satin enamel. Trays aluminized. Size: 14½ x 6½ x 7 inches. Packed 6 to a carton, weight 12 lbs.

Price, No. **14-2** Tool and Tackle Box.....each **$3.30**

No. 1564 TOOL AND TACKLE BOX



Large sized box with durable gray satin enamel finish. Sturdy full size automatic aluminized tray held rigidly by six heavy tray supports. Plenty of partitions which are removable and adjustable. Nickel plated hardware consists of strong, finger-grip handle with place for nameplate. Automatic safety lock. Two side snap catches. Full colored handy rule on cover of bx. Round cornered construction for strength and beauty.

Size 12⅞ x 6⅛ x 5⅝ inches. Packed 12 to a carton. Weight per carton, 35 lbs.

Price, No. **1564** Tool and Tackle Box....each **$1.82**

No. 19-1 TOOL AND TACKLE BOX

Big, roomy box with a tray that has plenty of compartments for tools or tackle. Made of heavy steel, spot welded and finished in attractive baked, gray, satin-finish enamel. All corners and edges rounded. Positive snap catches and safety lock. Size: 19 x 6 x 6½ inches. Packed 4 to a carton, weight of carton, 18 lbs.

Price, No. **19-1** Tool and Tackle Box....each **$4.50**

SIMPLEX REEL OR DRUM JACKS

RATCHET LOWERING TYPES

For Speed in Operation



No. 322



No. 320A



No. 321

Regardless of the size or weight of cable, wire rope, belting or rope reels, there is a Simplex Jack that will handle them safely and efficiently. Simplex Reel Jacks are generally ordered in pairs, one for each side of the reel.

For outside work where the footing is usually uneven, use the Simplex No. 322. Its "T" shaped base, with the 3-threaded and adjustable steel rods, insures a firm—non-rocking foundation. (Base area 319 sq. inches). This model is built with both right and left hand bases, so the men operating the Jacks are in sight of each other and raise the reel evenly. No. 322 handles reels from 36 to 84 inches in diameter, and has a double–acting mechanism. (Lifts or lowers on both the upward and downward stroke of the lever). The No. 322 has 3 lifting hooks, 1 for 3-inch and 2 for 2½-inch spindles.

Nos. 321 and 320A are best suited for warehouse and shop service. The No. 321 is preferred by many users because it will handle reels from 20 to 96 inches in diameter. No. 320A handles reels from 20 to 60 inches in diameter. Both are single acting. (Lifts or lowers on the downward stroke of the lever). No. 321 has 5 lifting hooks, 1 for 3½-inch, 1 for 3-inch and 3 for 2½-inch spindles. No. 320A has 3 lifting hooks, 1 for 2½-inch and 2 for 2-inch spindles.

SCREW-TYPE REEL JACKS

Provide an economical method of handling standard weight reels. No. 1CR for reels 40 to 60 inches in diameter. The 3-way nut makes it possible to operate the Simplex more easily and faster than any other "A" frame screw-type reel Jacks. No. 1CR has 1 spindle cap for 2¼-inch spindles.

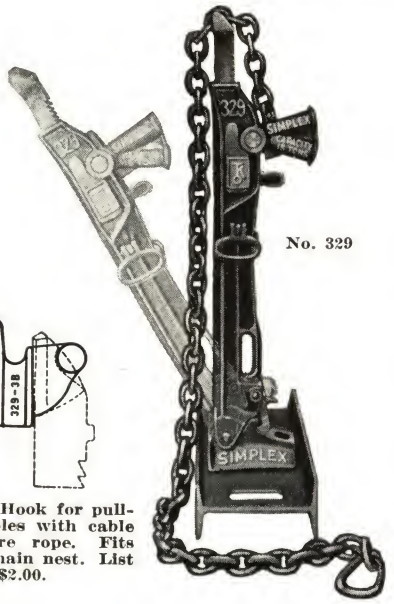


Nos. 1CR

Jack No.	Capacity Tons	Height Inches	Lift Inches	Wt. Lb.	Length Lever	Price Each
1CR	5	19¾	13¼	60	.....	**$32.00**
320A	5	21	10	48	30″	**50.00**
321	10	34¼	15	108	60″	**82.00**
322	10	29	13¾	104	60″	**92.00**

All Simplex Reel Jacks are equipped with laminated, oil-treated oak bases for protection against dampness and exposure to weather.

SIMPLEX POLE PULLING AND POLE STRAIGHTENING JACKS



No. 329

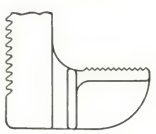
Cable Hook for pulling poles with cable or wire rope. Fits into chain nest. List Price $2.00.



No. 325



No. 310A



Nos. A-1538, 329, 325, and 310A

For many years Simplex Pole Pulling and Pole Straightening Jacks have been saving man-hours and reducing "out-of-service" hours for electric power, telephone, telegraph and trolley companies.

One or two men can pull or straighten poles, pull butts or move loaded poles with no interruption to service and without digging, regardless of the size of the poles, or depth in the ground.

No. 329 is the standard Jack of the Bell Telephone Systems and will handle any pole, large or small. It is single acting, ratchet lowering.

A companion model, the No. A-1538 is available in an aluminum housing which provides lightness for easier portability without sacrifice of strength.

No. 325 is the Simplex Junior Pole Jack and is used for poles up to 30 feet in height. In addition, it is handy as a guy-line tightener and for pulling underground cables. The 8-ft. pike-pole furnished with the No. 325 is especially handy when it is necessary to straighten poles located beside ditches. Recommended for rural electrification. It is single acting, ratchet lowering.

The No. 310A is usually thought of as an Emergency All-Purpose Jack. It also pivots on its base, making an excellent Pole Pulling and Straightening Jack where the amount of lift is not of primary importance. Compact and husky. It is single acting, ratchet lowering. Lifts on the cap, two positions of the auxiliary shoe, the toe lift, and at any intermediate point by using the chain as a sling.

Jack No.	Capacity Tons	Height Inches	Lift Inches	Jack Weight Pounds	Weight Complete	List Price
*310A	15	22	14	74	109	**$84.00**
‡325	5	50	36	34	98	**78.50**
†329	15	37¾	22	95	193	**110.00**
A-1538	15	37¾	22	63	155	**112.75**

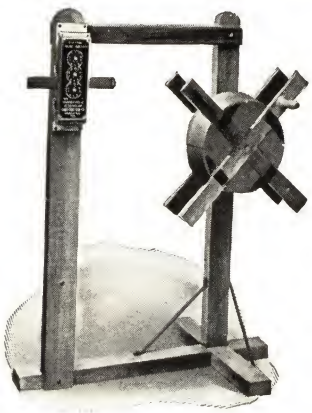
*Standard Equipment (**No. 310A**)—5′ steel chain; auxiliary shoe of forged alloy steel; and 5′ steel lever bar that is chisel-pointed and heat-treated. If complete equipment is not required deduct from list price—**$5.50** for chain; **$4.50** for shoe; and **$2.00** for lever bar.

†Standard Equipment (**No. 329**) — 8′ scarf-welded BBB steel chain fitted with pear-shaped link; 10″ x 24″ I-beam base with hand hole; and 5′ steel lever bar that is tapered and heat-treated. If complete equipment is not required, deduct from list price—**$7.00** for chain; **$5.00** for "I" Beam base; **$2.00** for lever bar.

Optional Equipment (**No. 329**)—Special, 8′ long, ⅝″ DOUBLE STRENGTH HEAT-TREATED ALLOY STEEL CHAIN with pear-shaped link — Price on application.

‡Standard Equipment (**No. 325**)—4′ steel pinch bar lever that is tapered and heat-treated; 5′ steel chain; an 8″x15″ steel channel base; and 8′ pike pole (seamless tubing), equipped with a malleable iron forked cap for biting into wood for straightening poles. If complete equipment is not required, deduct from list price—**$8.50** for pike pole; **$3.00** for base; **$4.50** for chain; **$2.00** for lever bar.

MINNEAPOLIS REEL AND METER



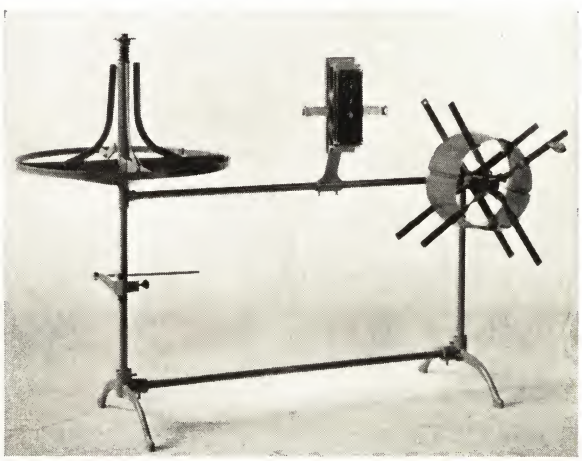
For measuring various sizes of wire, cordage, etc. to ¾-inch. Wire passes between two self-adjusting rollers and will be measured accurately whether large or small size. Reel is provided with removable cross bars and the drum with grooves so the coil can be bound with tie wires and removed in compact form.

Meter can also be furnished without reel for fastening to side of counter, wall or post and on the counter.

Cable Meter on base will measure small sizes of wires as well as large cable, flexible conduit, rope, etc., to 1½ inches.

	Price Each		Price Each
Reel and Meter	**$48.00**	Counter Meter	**$27.00**
Meter only	**25.50**	Cable Meter	**38.50**

MINNEAPOLIS PAYOUT AND TAKE-UP WIRE MEASURING MACHINE

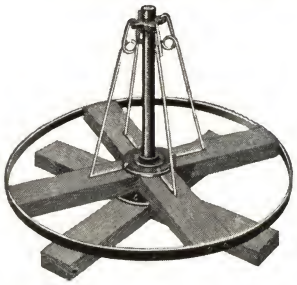


The FS2RA is a combination payout reel and take-up reel mounted on the one stand, made of all metal and very rigid. A convenient outfit for unreeling, measuring and re-reeling wire.

The payout reel is adjustable, will take small coil of lamp cord and wires up to the large coils of stranded double braid wire. A spool holding attachment, for small additional price, measures material off spools. Capacity of reels approximately 2,000 feet of No. 14 S.B., other sizes in proportion.

Cat. No.	Description	List Price
FS2RA	Complete without spool holder	**$98.50**
FS2R	Reels only without meter	**73.00**
A	Meter only	**25.50**
	Spool holder only	**2.50**

MINNEAPOLIS PAYOUT REEL



SELF-ADJUSTING

Adjustable to coils from lamp cord to No. 0. Size, 24 inches in diameter, 21 inches high; weight, 20 pounds.

Price, No. P1.....**$17.65**

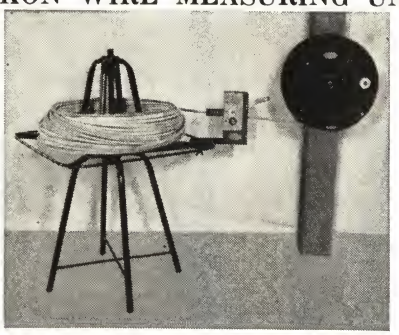
WALDMAN WIRE MEASURING REEL



Measures all wires from No. 0 to 40 inclusive. Can be fastened to counter or side wall and occupies but little space. The winder and reel may be folded when not in use.

Cat. No.	Description	Price Each
1	Folding Reel	**$ 6.00**
2	Measuring Machine	**20.00**
3	Wire Winder	**10.00**

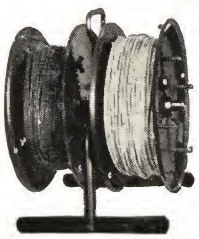
HYKON WIRE MEASURING UNIT



A complete unit for quick measuring of wire or cable up to 1 inch diameter. Takes up little floor space. Complete unit consists of Storeroom Reel, Meter and Take-up Reel, which are also available separately. Sturdy welded steel construction yet light and portable. Weight, packed, 59 lbs.

Price, **SRM-18** Unit	complete	**$76.00**
Storeroom Reel Only		**38.50**
Meter Only		**27.50**
Take-Up Reel Only		**10.00**

DOUBLE UNIT REEL



Wire may be reeled off top or bottom from any angle without a kink or snarl. Reels quickly and easily loaded in 30 seconds. The 15-inch reel takes two coils of No. 8 and smalier wire. The 18-inch reel takes large diameter coils of wire; also heavier wire, loom and light cables. HyKon reels are also made in single, four and six-gang units.

Size	15-inch	18-inch
Weight, packed	25 ibs.	30 lbs.
Price, each	**$18.75**	**$21.75**

HYKON WIRING REELS

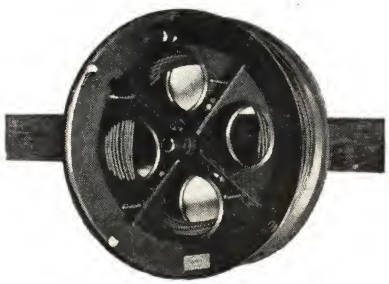


SINGLE UNIT REEL

The Single Unit Reel handles unwieldly metallic cable with amazing facility. The non-metallic cable comes off the reel without a twist, ready to be laid. The frame work takes up very little space, but supports the heaviest roll of wire.

Size	15-in.	18-in.
Wt. packed	16 lbs.	19 lbs.
Price, each	**$13.50**	**$16.50**

INDIVIDUAL REELS



This reel is mounted on a flanged spindle which can be bolted or screwed to studding, planks or frame work wherever needed.

An inexpensive reel of many uses.

Size	15-inch	18-inch
Weight, packed	11 pounds	13 pounds
Price, each	**$8.50**	**$10.00**



4 Unit Gang Reel

GANG REELS

The Four and Six Unit Gang Reels operate the same as the Double Units and these reels can be secured with 15 or 18 inch discs according to the size and length of wire used. With these reels any number of wires can be pulled into conduit or other forms of wiring at one time, without a kink or snarl in the wires. Gang Reels are indispensible in conduit work on large construction jobs and their immense saving time, labor and wire is obvious from the start. Handles at ends provide easy holds for carrying.

4 Unit Gang Reel

Size	15-inch	18-inch
Wt., packed	46 lbs.	58 lbs.
Price, each	**$34.25**	**$40.75**

6 Unit Gang Reel

Size	15-inch	18-inch
Wt., packed	72 lbs.	90 lbs.
Price, each	**$49.50**	**$59.50**

HYKON REELIFT



A quick and easy way to handle bulky, heavy cable reels. No dangerous jacks, no tugging or rolling of the reel. Just a simple lift on the handles and the reel sets up ready for unrolling the cable; pull back on the handles and the reel is back down on the floor. The Reelift will not tip when the cable is being pulled off.

The great leverage developed makes it a simple matter for one man to easily handle 1000-lb. reels. Two men can put up a ton or more. To increase the leverage for the heavier reels, slip a short length of 1-inch conduit inside the handles.

Model No.	Description	Price Each
RL25	For reels up to 36-in. diameter and 25-in. wide	**$31.00**
RL31	For reels up to 42-in. diameter and 31-in. wide	**37.00**

THE ITEMS INCLUDED

IN THIS CATALOG ARE SUCH

THAT YOU CAN MAKE YOUR

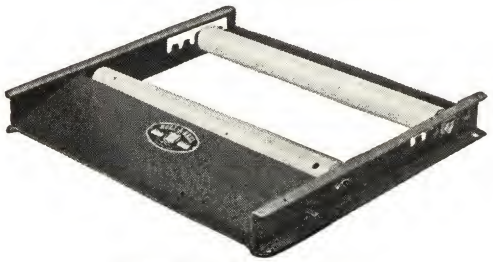
SELECTION WITH CONFIDENCE

ROLL-A-REEL

Roll-A-Reel is built to handle heavy reels quickly economically and safely. By simply raising the roller, adjustment may be made for various size reels. A positive roller lock makes reel removal easy. Ideal for "on the job" reel dispensing.

It can easily be carried to reel location, in storage or on the job, and will give years of trouble-free service at an amazingly low initial cost. Roll-A-Reel is one of the most indispensable tools on the market today.

STYLE "A" ROLL-A-REEL

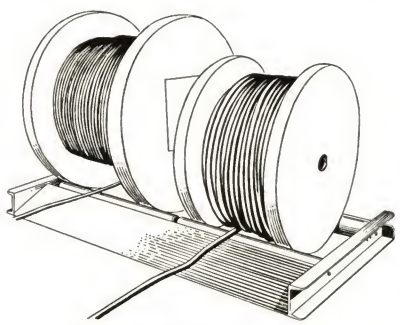


Style "A"—30 Inches Wide

Roll-A-Reel is sturdily built, with heavy gauge steel frame to roll reels of wire, cable, steel strand, ropes, or anything dispensed from a reel — low slanted front for easy loading and unloading — lightweight, portable — gives years of service at low cost.

Style A—Width 30 inches; depth 28 inches; height 3½ inches. Supports up to one 28-inch wide reel. Capacity 2000 lbs.; weight 50 lbs. **$37.50**

STYLE "B" ROLL-A-REEL



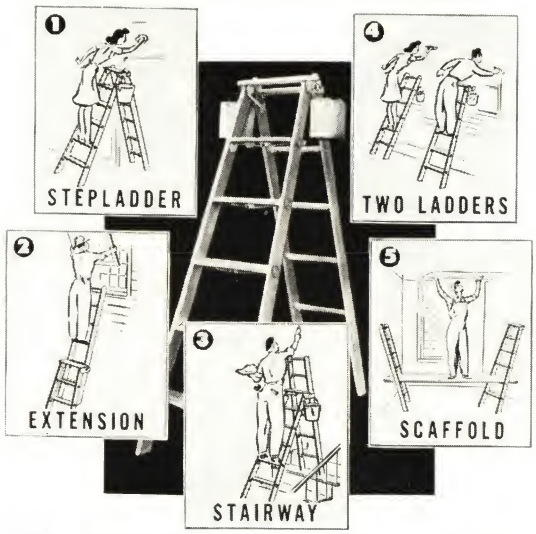
Style "B"—52 Inches Wide

Roll-A-Reel Style B is designed to handle either two 24-inch wide reels or one reel up to 48 inches wide. Rigidly aligned ball-bearing rollers on each side compensate for possible variations in reel diameter—no slipping or friction between rollers and reel. Style B has two locks — one for each front roller. Cable in both styles can be safely taken from front or back, top or bottom of reel, as desired. Both models feature strong ball-bearing rollers with hex ends locking in end-channels, insuring smooth reeling. Roll-A-Reel stands upright in any end position for safety and convenience.

Style B—Width 52 inches; depth 28 inches; height 4 inches. Capacity 4000 lbs. Supports two 24-inch wide reels or up to one 48-inch wide reel. Weight 110 lbs. **$75.00**

LINCOLN 5-WAY MASTER-ALL

ALL-PURPOSE SAFETY LADDER



1. **It's a Stepladder**—A better, stronger ladder—no side sway or wobble. Light weight and compact.
2. **It's an Extension Ladder**—Extends FOOT by FOOT, up or down, just where you need it. Locks securely at desired height.
3. **It's a Stairway Ladder**—To reach those hard-to-get spots. Provides positive footing on any stairway.
4. **It's Two Individual Ladders**—Slide the two sections apart and use each as a separate ladder for double duty performance.
5. **It's a Scaffold Base**—Sturdy and dependable—for use wherever light scaffold is needed.

Pail Hangers—Lanced from ear on both sides to provide perfect place for hanging pails and buckets.

Heavy Metal Trusses and $\frac{3}{16}$-inch steel rods—reinforce and strengthen each tread.

Traction Covered Treads — For safe, non-slip standing surface.

Spread—Designed to permit the use of a 12-inch plank through the ladder at any point.

Specifications

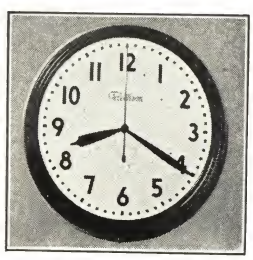
Side rails, $\frac{25}{32}$ x 2¾ inches; back legs, $\frac{25}{32}$ x 2¾ inches; treads, $\frac{25}{32}$ x 3½inches; rungs, 1⅛-inch sanded hickory mortised into back legs, nailed and glued; hardware, extra heavy gauge, red lacquer dipped to prevent rusting.

Sizes Available—4, 5, 6, 7, 8 and 9 feet as stepladder extends to 6, 8, 10, 12, 14 and 16 feet.

Size	Price	Size	Price
4 ft.	$ 8.95	7 ft.	$14.95
5 ft.	10.95	8 ft.	16.95
6 ft.	12.95	9 ft.	18.95

TELECHRON BUSINESS CLOCKS

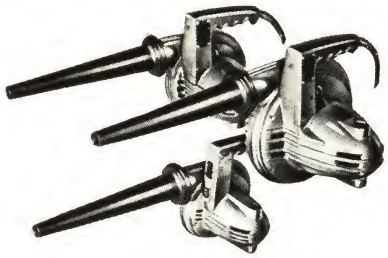
Model No. 1H1308. Sturdy plastic case with brown mahogany finish; bright 8-inch dial—ideal for office, factory, school or store. **1H1312**. Same with 12-inch dial.



Price, Model **1H1308** (excluding tax)....**$9.95**

Price, Model **1H1312** (excluding tax)..**$12.95**

IDEAL HAND TYPE CLEANERS



Developed through years of air-engineering experience, the improved Ideal Cleaner will do a better job, faster, at less cost. These light weight, perfectly balanced cleaners handle a wide range of work. Blows, vacuums and sprays. Can be operated continuously at peak efficiency and with amazing economy.

Delivers air at higher velocity (Heavy Duty Model — 26,500 feet per minute) yet, because it blows only dry air at low pressure the Ideal Cleaner does not harm even delicate equipment. Blower Nozzle is furnished as standard with Ideal Hand Type Cleaners.

Cat. No.	Description	Price Each
22-110	Heavy Duty Model (1⅓ H.P.)	**$229.00**
22-113	Medium Duty Model (⅔ H.P.)	**182.00**
22-163	Light Duty Model (½ H.P.)	**109.00**



STANDARD ATTACHMENTS FOR USE WITH HAND TYPE CLEANERS

Dust-proof bag, hose connection (inlet side), flexible hose (4 ft. x 1½ inches), metal nozzle (5 inch) and brush, flat fibre nozzle and shoulder strap.

Price, No. **22-109**, Std. Attachment Set ..... each **$36.30**

HEATER NOZZLE

Fits any Ideal Light Duty Hand Type Cleaner. Especially suitable for use where rapid removal of moisture is desirable in conjunction with cleaning. Also for quickly drying paints, varnish, ink, etc.



Price, No. **22-116** Heater Nozzle..... each **$32.20**

SCRAP COLLECTOR



(For Hand Type when used as Vacuum Cleaner.) Catches and holds heavy metal particles such as nails, screws, nuts, washers, etc. Protects fan and fan housing. Separates dust and dirt from scrap.

Price, No. **22-138** Scrap Collector..... each **$14.30**

SPRAYER ATTACHMENT

For spraying liquids, insecticides, varnish, lacquer, calcimine, etc.

Cat. No.	Description	Price Each
22-139	Quart size	**$9.00**
22-140	Pint size	**8.40**
22-143	Gallon size	**24.00**

IDEAL CLEANERS

TANK-TYPE CLEANER



Ideal Tank-Type Cleaner—for better, faster cleaning.

Particularly valuable for scrap collection and in removing water from factory or service station floors.

Unique filtering system eliminates the (conventional) external bag. Easily emptied. Remove the vacuum sealed lid and lift out the 9-gallon tank and dust bag.

Cleaner has large 5-inch wheels. Swivel wheels in the front. Small width clearance permits the Cleaner to be moved down narrow aisles. Low center of gravity makes it difficult to upset.

The 1⅓ H.P. motor provides ample power without overheating. Complete with 30-foot cord and a handy storage compartment for attachments.

ORDER ATTACHMENTS SEPARATELY

Cat. No.	Description	Price Each
22-200	Tank Cleaner Only, 115 v., AC-DC	**$555.00**
22-201	Tank Cleaner Only, 230 v., AC-DC	**555.50**

BLO-R-VAC TANK CLEANER

Tank Cleaner, Hand Cleaner and Blower All in One



Blo-R-Vac is the answer to cleaning requirements for industrial, and commercial establishments, theatres and institutions. Does the work of two or more ordinary Cleaners. Used as a Tank Cleaner, it picks up dirt, dust and metal particles. Quickly removes water from floors after scrubbing and it is especially valuable in scrap collection. The power unit is a complete unit in itself. Removed from the tank it becomes a powerful, hand-type vacuum cleaner or blower.

SPECIFICATIONS UPON REQUEST

Blo-R-Vac Cleaners are available in two models; Heavy Duty (1⅓ H.P.) and Medium Duty (⅔ H.P.).

Cat. No.	Rating	Price Each
22-210	1⅓ H.P., 115 v. AC-DC	**$379.00**
22-213	⅔ H.P., 115 v., AC-DC	**332.00**

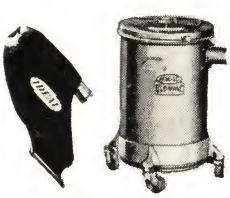
ORDER ATTACHMENTS SEPARATELY

IDEAL TANK CLEANER ATTACHMENTS

Standard Set of Attachments complete for either of the above Tanks. No. **22-217**..... **$99.00**

Many other special attachments available.

IDEAL CONVERSION PACK



Convert your Ideal Blower into a Tank Cleaner with the Conversion Pack. Consists of 12-gallon tank and dust-tight bag. Adaptable to any of the following:

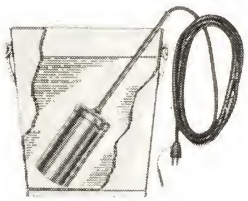
Heavy Duty Models: Nos. 22-110, 22-111, 22-112

Medium Duty Models: Nos. 22-113, 22-114, 22-115.

Price, No. **22-216**..... **$150.00**

SMITH-GATES ELECTRIC PRODUCTS

PAIL WATER HEATER



For Dairy use—in the barn and milk house. Cows produce best when udder and teats are massaged before milking, using 130 degree water.

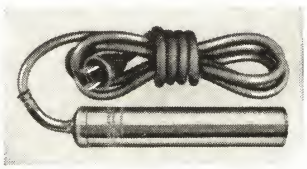
For Semi - Scalding Poultry — better appearing poultry meat. 130° water required for best results.

The Superspeed Pail Heater automatically maintains 130° — the perfect temperature for the above two important uses. Comes complete with 12-ft. anchor-sealed, 3-conductor Neoprene cord and plug with grounding connections. 1000 watts 110 VAC. Packed separately.

Hotter Water—160° required for sterilization wash-up after milking. Also for cleaning soiled eggs. Same as above except a higher 160° setting. 1000 watts 110 VAC. Packed separately.

Cat. No.	Description	Shpg. Wt. Lbs.	Price* Each
PWH1000130	Pail Water Heater	5	**$17.65**
PWH1000160	For Hotter Water.....	5	**17.65**

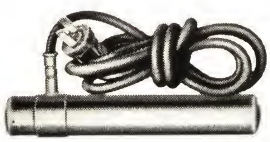
POULTRY WATER WARMER



Feeding hens that don't lay is throwing money away. Regardless of all other conditions, hens can't lay if they don't drink a needed amount of water. The Smith-Gates Poultry Water Warmer is ideal for use in open pan or pail type waterers. Will keep 5 gals. at 50° during the winter weather. Pays for itself in one month. Overall length (case and stem) 8 inches. Complete with 6-ft. anchor-sealed Neoprene cord and plug. Available in both 150 and 250 watts. Packed in display carton.

Cat. No.	Rating Watts	Rating Volts	Std. Pkg.	Shpg. Wt. Lbs.	Price* Each
10051	150	110 AC	12	10	**$5.55**
10052	250	110 AC	10	9	**6.70**

S-G WATER HEATER



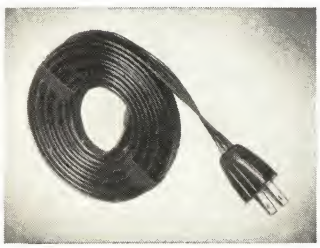
For use in Dairy and Hog Waterers where 500 watts of controlled heat is needed. Stock does better when they have drinking water warmed to 50° during cold weather. This water heater makes it easy to provide that improved condition. Like the others, it is rust-proof, sealed watertight and its operation is thermostat controlled, operating only when heat is needed. The unit is 8 inches long by 1¼ inches in diameter, equipped with 12-ft. anchor-sealed 3-conductor Neoprene cord and plug with grounding connection. Packed separately in display carton.

Cat. No.	Rating Watts	Rating Volts	Std. Pkg.	Shpg. Wt. Lbs.	Price* Each
WWG50050	500	110 AC	5	9	**$11.10**

*Excise Tax Extra.

SMITH-GATES ELECTRIC PRODUCTS

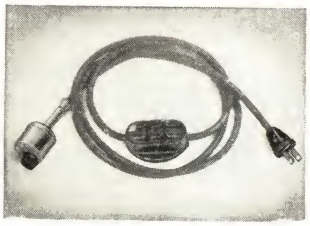
S-G ELECTRIC THERMOTAPE



Protects water pipes, keeps them in use and safe from freezing. Available in several convenient lengths, all for plug-in use on 110 volt service. A 20-foot length means twenty feet of protection and no return wire required. Thermotape is easy to use and saves many dollars on frozen water pipes. Thermotape is safe because heating wires are encased in a strong insulating glass braiding over which an approved, high-temperature thermal plastic is formed.

Cat. No.	Length with Plug	Watts	Price Each
TT6	6 feet	20	**$3.95**
TT12	12 feet	40	**5.70**
TTF20	20 feet	140	**6.15**
TTF40	40 feet	280	**9.15**
TTF60	60 feet	420	**13.35**

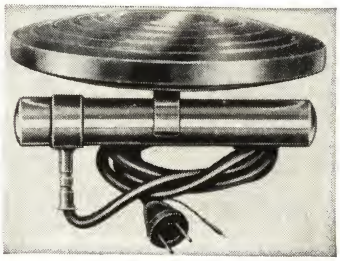
TEMPERATURE CONTROL THERMOSTAT-ADJUSTAT



Gives automatic control within the range of 20° to 80° F. by simply turning the control knob for the desired temperature wanted. Furnished complete with 6-ft. Neoprene cord, attachment plug and a plastic triple outlet box for connecting one to three lengths of Thermotape when total capacity does not exceed 900 watts.

Cat. No.	Rating Watts	Rating Volts	Std. Pkg.	Shpg. Wt. Lbs.	Price Each
TSA935	900	110 VAC	10	8	**$5.75**

FLOATING STOCK TANK WATER WARMER



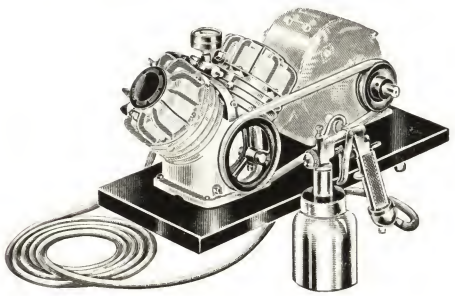
Keeps water from freezing. Easy to use — it's automatic. Just place the float (with heating unit down) on surface of water in any size tank, plug the lead cord into a 110-volt receptacle and the water will be kept open so stock can drink even when temperatures drop below zero. This unit places 500 watts of heat just below the surface of water where it will be most effective with the least use of electricity. Automatic thermostat control assures lowest operating cost. Equipped with 12 feet of anchor-sealed (water proof) 3-conductor Neoprene cord and plug with grounding connection. The heating unit is attached to the bottom of a heavy-gauge, nickel-plated copper float by spring clip — can be removed from the float for use as an immersion heater. 500 watts. 110 volts A.C.

Cat. No.	Rating Watts	Rating Volts	Std. Pkg.	Shpg. Wt.Lbs.	Price* Each
FWWG50050	500	110 VAC	5	13	**$13.50**

*Excise Tax Extra.

SPEEDY PAINT SPRAYERS

MASTER TWIN No. 444

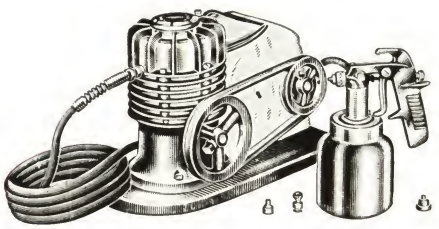


Double your spraying speed and capacity with this powerful Master Twin Speed Sprayer. Rugged, sturdy. Completely modern in design and performance. No oiled surfaces come in contact with air at any time.

Handles house and barn paints, lacquers, enamels, varnishes, cold water paint and kalsomine. No job to big. Assembled on straight line production basis too strict specifications — no useless weight or gadgets. All parts interchangeable. Operated by ½ H.P. electric motor or gasoline engine. Shipping weight, 40 lbs.

Price, No. **444** outfit complete as shown with No. 121 gun and 15-ft. ¼-inch I.D. high-test rubber air hose, V-belt and motor pulley but without motor.....**$59.50**
No. **440** "V" Twin Oil-Less Compressor only, mounted on base with "V" belt, motor pulley, without motor.....**$48.00**
No. **121** Speedy Internal Mix Spray Gun. 1-quart cup and 2 spray nozzles..... **$9.95**

SPEEDY SPECIAL No. 890



Oil-less outfit. Delivers 2 cu. ft. clean air per minute at 30 to 40 pounds pressure. Sturdy, built-for-service spraying outfit that can be moved about at will. Four to six times faster than hand-brushing. Handles the toughest spraying jobs, requires practically no attention.

Ball bearings are grease packed and sealed at the factory — never need oiling. Sprays paint, enamel, varnishes, lacquers, insecticides and disinfectants. Also handy for use as vacuum pump or for inflating tires. Will give practical effective service with any gun except No. 125. Operated by ¼ H.P. 1750 R.P.M. electric motor.

Shipping weight, 21 lbs.

Price, No. **890** outfit complete as shown, with "V" belt, motor pulley, No. 915, 15-ft. high-test air hose and No. 112 gun, but without motor **$32.50**
No. **875** Compressor only, mounted on steel base with "V" belt and motor pulley. Without motor **$24.00**
No. **112** Speedy Internal Mix Spray Gun. 1-quart cup and 2 spray nozzles..... **$7.50**

SPEEDY PAINT SPRAYERS

SPEEDY SPRAYER No. 750



Now for mechanics, hobbyists and home owners — a professional quality Speedy Sprayer at an extremely low price. Sprays any material — paints, enamels, varnishes, lacquers, calcimine, water base paints and insecticides. Thoroughly atomizes any material. Produces a mirror-smooth finish, free from brush marks. Quickly pays for itself in savings of time, labor and paint. Also ideal for spraying insecticides and weed killers.

Uses any ½ H.P. motor with ½-inch shaft. Develops 25 lbs. working pressure and delivers 1½ cubic feet of air per minute. Oversize diaphragm assures clean, oil-free air. Lubricated for life, never needs oiling.

Price, No. **750** outfit complete with compressor, rubber cushioned base, one-piece aluminum pint cup, syphon-feed gun, 10 feet of hose but without motor.....**$21.50**
No. **720** Compressor **16.95**
No. **145** Spray Gun **3.95**

JUSTRITE SAFETY CANS



1 Pint and 1 Qt. Sizes | **½ Gallon and 1 Gallon Sizes** | **2, 3, and 5 Gallon Sizes**

Non-explosive Cans — for using, handling and storing gasoline, benzine and other explosive or flammable liquids. Approved, inspected and labelled by Underwriters' Laboratories, Inc. Approved by Factory Mutual Fire Insurance Companies (as below). Finished in baked Red Enamel. Made of 24 gauge steel, lead coated. Large nozzles, easy to fill. "No-Spill" pouring lip. Balances for easy carrying. Seven sizes.

Cat. No.	Capacity	Wt.Lbs., Each	Price Each	Cat. No.	Capacity	Wt.Lbs., Each	Price Each
1000	1 Pt.	2	**$5.00**	**1040**	2 Gal.	7	**$7.60**
1010	1 Qt.	2½	**5.00**	**1050**	3 Gal.	8	**8.30**
1020	½ Gal.	3	**6.10**	**1060**	5 Gal.	9	**9.40**
1030	1 Gal.	4	**6.30**	.....	.....	..	.....

Used with or without "non-flash-back" baffle Screens. Screens are easily removed or inserted — can be purchased separately (**$0.90** each); not required by Underwriters' Laboratories, Inc., but are required by Factory Mutual in 1, 2, 3 and 5 gallon sizes.

JUSTRITE OILY WASTE CANS

For safe handling of waste, rags and other flammable materials. Approved and labelled by Underwriters' and Factory Mutual Insurance Companies. Body of 24 gauge galvanized sheet steel, cover No. 22 gauge. 4-inch legs, and handles, are of ⅛-inch band iron (1 inch wide).



With Foot Lever

With Foot Lever Attachment

Cat. No.	Size, Inches Excl. of Legs	Cap. Gal.	Shpg. Wt. Lbs.	Price Each
9-1	11¾x13	6	14	$8.80
9-3	13½x15	10	17	11.00
9-5	15½x17	14	21	13.00

Without Foot Lever

9-1A	11¾x13	6	12	7.80
9-3A	13½x15	10	15	10.00
9-5A	13½x17	14	19	11.70

FAIRBANKS-MORSE AUTOMATIC CELLAR DRAINERS

Fully Automatic—Operates Only When Flood or Seepage Water Enters

Protects crippling of water heater or heater motors from water damage. Protects furniture and household effects stored in basement from water damage. Prevents deterioration of buildings against ravages of seepage or storm floods.

MODEL 49A CELLAR DRAINER



The small diameter of the volute makes it possible to install this unit within a 12-inch diameter sump. Thus the sump might be fashioned from a section of 12-inch tile.

Shaft is of ½-inch stainless steel with oilite bearings. A bronze open type impeller and a brass screen are features that contribute to the life of this unit. Pump volute and cover are cast iron and permit the impeller to operate within 1 inch of the floor. Two rubber vulcanized floats may be adjusted as desired to regulate the starting and shut-off water levels.



MODEL 49B CELLAR DRAINER

This is an all bronze sump pump of greater capacity. The impeller, pump castings, and combination pump base and strainer are made of bronze. The screen has a unique design to prevent clogging.

A ½-inch diameter stainless steel shaft is journaled in a 2-inch oilite bronze bearing. The motor is ⅓ HP. split phase type with built in switch and a brass float. In capacity, workmanship and selection of materials this sump pump represents the finest unit we have ever offered.

Sump Pumps—Intermittent Service

Selection and data table for Standard 2-foot Sump Pumps.

Model No.	HP	Height Over All	Height Over Column	Approx. Gallons Per Hour Against Discharge Head Of 5′	10′	15′	20′	Approx. Shpg. Wt. Lbs.
				Steel				
49A	⅓	3′4″	1¾	4200	2880	2040	1200	60
				Brass				
49B	⅓	3′4″	1¾	4600	4000	3200	1800	65

Price, Model **49A** .....; Model **49B** .....

KEILSON GOVERNMENT-APPROVED APARTMENT HOUSE MAIL BOXES

Furnished in Groups 3- up to 12-Gang Boxes



Group "C"

Artistic design—rolled edges—heavy Steel fronts (until Gov't Regulations on brass are lifted)—welded units—scientific construction.

Each box is (overall) 17⅛ inches high and 3½ inches wide. Receives mail up to 15 inches by 3¼ inches. Visitors' card slot, 2¼ inches. Tenant locks contain 3 tumblers, having 210 changes. Only thoroughly insulated push buttons are used.

A Proper Type for Every Purpose

Group "A"—Single Row	Without Push Buttons
Group "B"—Double Row	
Group "C"—Single Row	With Push Buttons
Group "D"—Double Row	
Group "G"—Single Row	With Push Button
Group "H"—Double Row	Name Panel Unit*
Group "J"—Single Row	With Mouth Pieces and
Group "K"—Double Row	Push Buttons

* Can also be used for Speaking Tube.

On Double Row Mountings steel plates are furnished (no charge) for fastening together; for multiple groupings, steel plates are also furnished—specify arrangement when ordering.

Any of the groups of Keilson Boxes may be used in various multiples so that every requirement can be covered from boxes carried in stock. Each unit is intended to serve one tenant.

Finish: Sprayed brass. Other finishes on request. To comply with Post Office Order (when installing) height from floor to keyhole of Government lock should be:

59 inches—on single row mountings
66 inches—on double row mountings

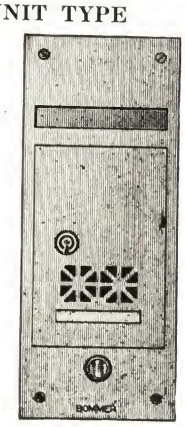
All Keilson Boxes are intended for fastening into the wall, with expansion bolts or screws (provision is made to fasten each box, if desired). Boxes are made to overlap wall opening 1 inch to take care of any irregular cutting of walls.

2 GROUP MAIL BOX UNIT TYPE

Size over frame for a 2 Group Unit, 17⅛ in. high, 9 in. wide.

Group L—No Pushes—Wall cut-out 15¼ x 7½ x 4¼ inches deep.

Group M—Pushes—Wall cut-out 16x7½x4¼ inches deep.


No. B-520

VESTIBULE TYPE

B500—No Pushes
B520—Pushes
B540—Push and Mouthpiece

Actual size: 11⅛ x 4⅝ inches. Side hinged door with 3⅞-inch letter opening drop. Name panel 2½ inches. Attached tin back, 7⅛ x 4 x 2 inches.

Solid Steel fronts (until Gov't Regulations on brass are lifted)—Sprayed Brass finish. Other finishes on request.

U.S. HOSE

U.S. RAINBOW—WATER HOSE

Style P-340



A high-quality, long-wearing and thoroughly satisfactory hose of the braided and molded type. The carcass of U.S. Rainbow is built up of stoutly braided rayon plies, thoroughly impregnated with rubber, combining strength with exceptional flexibility.

Both the inner tube and the black outer cover are seamless and compounded of special stocks. The cover is tough, long-wearing, highly resistant to abrasive action from dragging or scuffing. Furnished in continuous lengths, in the following sizes:

Size Inch	Braid	Approx. O.D. In.	Rec. W.P. Lbs.	Approx. Wt. Lbs. Per 100 Ft.
½	2	37/64	150	27
¾	2	1 3/32	150	42.5
1	2	1 7/16	150	51

U.S. RAINBOW GENERAL PURPOSE HOSE

Style P-290



As a general utility hose, U.S. Rainbow has long been a favorite. It is braided continuous length construction made by the lead press method. A red, abrasion-resistant Neoprene cover has all the toughness and wearing qualities demanded for severe service conditions and rough handling. The high strength rayon braids offer maximum pressure resistance.

Developed especially for use with air-operated tools, the Neoprene tube also will handle satisfactorily water, oil, most insecticides and chemicals, carbonic and other dilute acids — almost any fluid. Available in continuous lengths up to 500 feet in the following sizes:

Size Inch	Braid	Approx. O.D. In.	Rec. W.P. Lbs.	Approx. Wt. Lbs. Per 100 Ft.
½	2	31/32	175	40.9
⅝	2	1 3/32	175	47.7
¾	2	1 7/32	175	54.5
1	2	1 31/64	175	69.7

U.S. DEXTER LIGHTWEIGHT SMOOTH BORE SUCTION HOSE—Style P-5126



Especially designed for irrigation service; also recommended for light coal mining suction and all light-duty service. Has a smooth bore construction with wear-resistant black cover, two plies of light duck, a reinforcing wire spiral and a rubber tube. Ends are reinforced. Does not kink or buckle when bent sharply. Max. length—50 ft. in sizes 2 in., 2½ in., 3 in. and 4 in.

U.S. HOSE

U.S. RAINBOW—GENERAL PURPOSE SMALL HOSE

Smooth, Style P-282—Corrugated, Style P-283



U.S. Rainbow Small Hose will not kink or remain in a permanently flattened condition, if crushed. Yet it is extremely light and flexible. It is rayon reinforced in one- or two-braid construction, depending on pressure requirements.

Welding and cutting operations are the more important use of this type of hose. Excellent as tire inflation hose or wherever small diameter hose is required.

Corrugated covers in black, red or green; smooth in black and red only. The red cover is generally used for gas or acetylene line; the black or green cover for the oxygen line. Lengths up to 500 feet.

Style P-282 (Smooth Cover)

Size Inch	Braid	Approx. O.D. In.	Rec. W.P. Lbs.	Approx. Wt. Lbs. Per 100 Ft.
¼	2	39/64	250	17.4
5/16	2	43/64	250	19.9
⅜	2	47/64	250	22.1

Style P-283 (Corrugated Cover)

3/16	1	7/16	175	9.3
¼	1	31/64	175	9.4
5/16	1	39/64	175	15.0
⅜	1	43/64	175	17.1
¼	2	⅝	250	17.4
5/16	2	11/16	250	19.9
⅜	2	¾	250	22.1

U.S. GIANT STEAM HOSE

Style H-2400



This is a superior steam hose of wrapped duck construction, recommended for general use and popular for pile driver service.

The wall structure of U.S. Giant Steam Hose is built up of heavy, strong multiple duck plies, properly balanced and applied with the highly perfected skill of long experience. The heavy rubber tube is of special compound to resist the temperatures of normal steam pressures. The cover is heat-resistant and extremely tough to withstand abrasion and take rough handling.

Maximum saturated steam pressure 100 lbs. Maximum length — 50 feet, in the following sizes:

Size In.	Ply	Approx. O.D. In.	Size In.	Ply	Approx. O.D. In.
½	5	1 15/64	1¼	6	2⅛
¾	5	1 31/64	1½	6	2⅜
1	6	1 37/32	2	8	3 1/32

PABCOWALL • tile-like wall covering



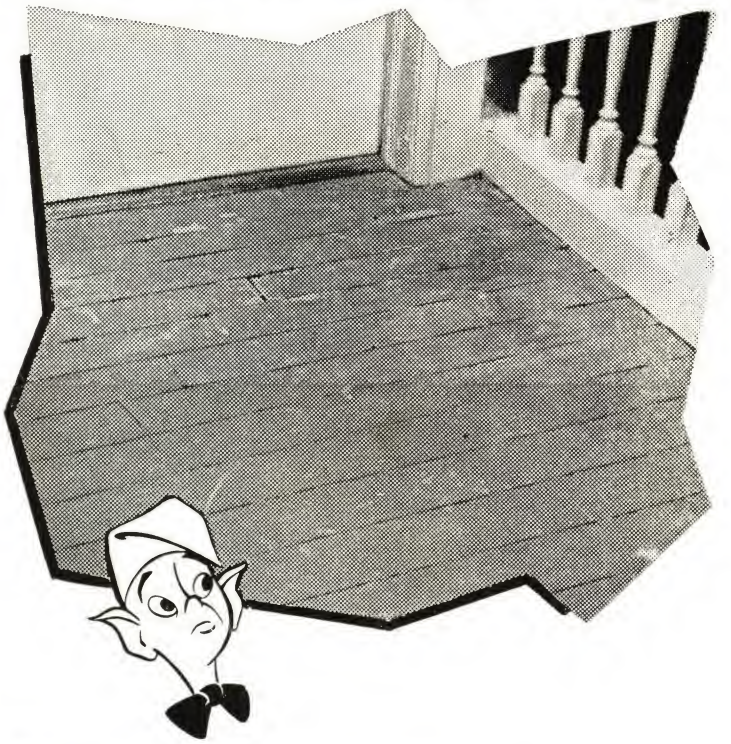
Easy to install . . . and easy on the budget!

Pabcowall — the amazing tile wall covering in roll form. Best-by-test in flexibility, alkali resistance, ease of cleaning, ease of cutting during installation, and styling. Brighten your work areas, recreation rooms, cafeterias and restrooms with beautiful, easy-to-keep-clean Pabcowall! There is a range of 14 colorations in solid colors, shaded tones resembling expensive hand-fired tile, and mottled blends. Pabcowall—styled in California, applauded by all America — is economical, simple to apply, easy to clean and will give you years of lasting beauty!

Colors:

No. 500—Lassen White
No. 501—Crater Black
No. 502—Salinas Green
No. 503—Portola Yellow
No. 505—Shasta White
No. 506—Amador Peach
No. 531—Menlo Gray
No. 532—Cambria Blue
No. 560—Catalina Mist
No. 562—Placer Gold
No. 563—Balboa Coral
No. 565—St. Helena Burgundy
No. 566—Colfax Gray
No. 567—Compton Green

Floors need improving ?



PABCO LINOLEUM TILE

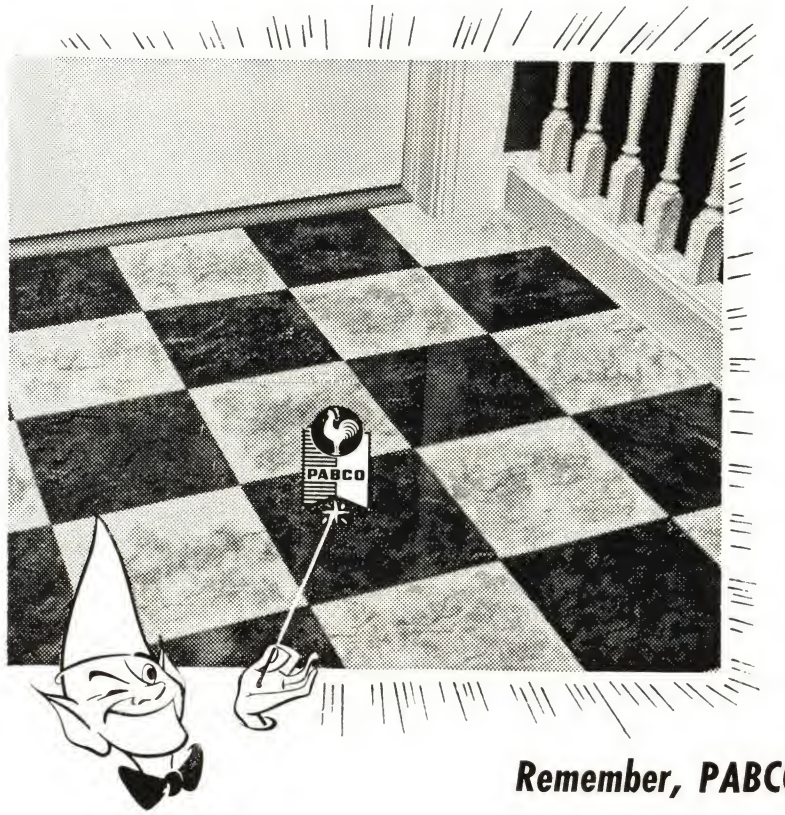
Comfortable Underfoot

So Easy to Install

Soil-Sealed Surface

Morale-Lifting Colors

PABCO LINOLEUM TILE'S the answer !



TODAY'S SMARTEST COLORS IN ONYXTONE MARBLING

Pabco Linoleum Tile is so easy to install. These beautiful 9″ x 9″ tiles are packed in cartons — giving you 63 square feet of floor covering in one case. Instruction folders are enclosed in each carton. The smart colors and fine marbleization will give your offices a "lift." Pabco's exclusive Soil–Sealed process makes Pabco Linoleum Tile amazingly resistant to dirt, stains and scuffmarks — cuts cleaning hours.

PERSONALIZE YOUR FLOORS — USE MORE THAN ONE COLOR

Remember, PABCO LINOLEUM TILE !

ONE INSTALLATION LEADS TO ANOTHER!



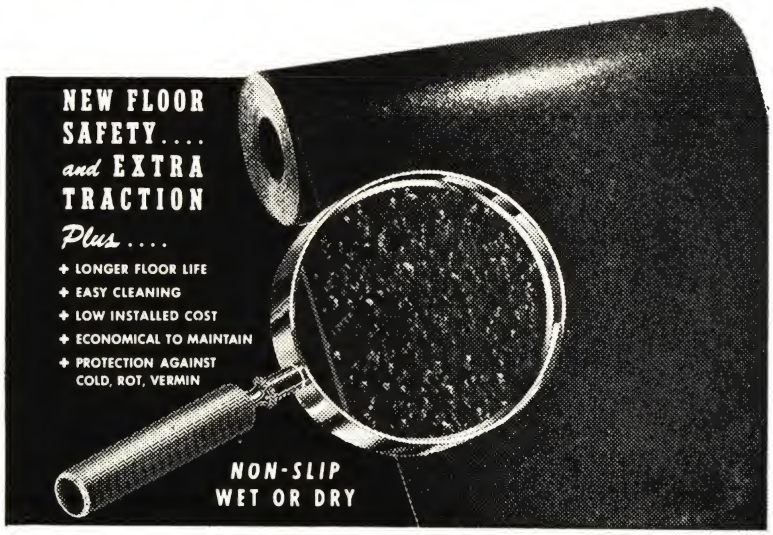
AMAZINGLY RESISTANT TO SEVERE WEAR AND ABUSE

The 27-year record of Pabco Mastipave, the low initial cost, the ease and speed of installation, plus its ability to withstand heavy foot traffic and resist abrasion, make it the all-purpose floor covering for industrial installations. If Mastipave is cut or punctured it will heal itself in a short time under the impact of heavy traffic. It is resilient — comfortable underfoot. Pabco Mastipave is manufactured in 30-yard rolls (36 inches wide), or factory-cut 9″ x 9″ tiles, in colors of black or terra cotta. It is easily and quickly installed by cold cementing over any surface . . . wood, concrete or metal, and requires no special under-floor preparation.

AND, WHEN SAFETY'S A FACTOR . . .

PABCO GRIP-TREAD IS THE ANSWER FOR YOU

For extra safety on stairs, ramps and around machinery, safety engineers and major accident insurance companies recommend Pabco Grip-Tread Mastipave. Low in cost, long in wear. Non-slip, wet or dry. The specially treated wearing-surface of Grip-Tread Mastipave assures traction underfoot, and thus prevents skidding and slipping. Grip-Tread also offers all of the features which has led to the installation of millions of square feet of regular Pabco Mastipave . . . durability, resilience, sanitation, quietness and easy cleaning. Grip-Tread is listed by Underwriters' Laboratories, Inc.



PABCO · NON-SLIP · GRIP TREAD
MASTIPAVE
FLOOR COVERING

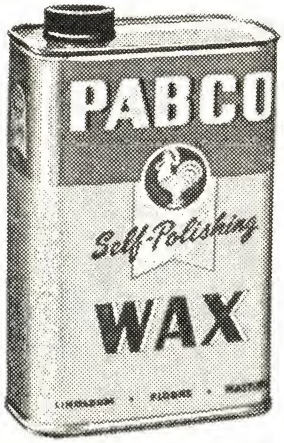
PABCO PRODUCTS



No. 120 PABCO LINOLEUM CLEANER

Fast-acting, liquid, harmless, economical. Rates as a "superior cleaner" by Pittsburgh Testing Laboratory. Removes soil, stains and old wax from resilient floor coverings. Cleans painted walls, woodwork, and other household surfaces, effectively, safely. Eliminates scrubbing. Twelve 1-quart bottles per carton.

No. 110 PABCO SELF-POLISHING WAX



Self-polishing water-emulsion wax. The same specially formulated wax applied at the factory on Pabco's famous Soil-Sealed Linoleum. Easy to apply. Dries quickly to a hard, smooth, lustrous finish. Provides lasting beauty and protection to resilient floor coverings. Twenty-four 1-pint cans per carton; 12 1-quart cans per carton; six 1-gallon cans per carton.



No. 50 PABCO MASTIPAVE CEMENT

The specified adhesive for all Mastipave installations. Assures a permanent bond of Mastipave direct to wood, concrete and metal surfaces. Water-resistant. Does not exude through seams and between tiles. Spreads evenly and smoothly. Four 1-gallon cans per carton; 5-gallon can; 55-gallon drum.

No. 19 PABCO MASTIPAVE CEMENT PRIMER

Fills and seals the pores of concrete. Insures a permanent bond for Mastipave Cement No. 50 to suspended and on-grade concrete sub-floors. Quick-setting, hard drying, liquid.

No. 1081 PABCO MASTIPAVE CEMENT THINNER

A special, fast-drying solvent for thinning Mastipave Cement No. 50 and Mastipave Primer No. 19 when necessary to improve penetration. A rag dampened with thinner will remove excess Mastipave Cement from floor and woodwork surfaces.

No. 9314 PABCO LINO-WELD



This is a floor covering adhesive that is not any ordinary linoleum paste. Used for laying all linoleums — greater strength — easier to use — sets faster, preventing buckling at joints and edges. Heavy appliances can be replaced the next day. Easily wiped from joints and edges. Won't stain lightest colors. One gallon cements 20 to 30 square yards.

Available in twelve 1-quart cans per carton; four 1-gallon cans per carton; 3½-gallon can and 5-gallon can.

Refer to separate price sheet for complete price data.

BONDED CROWN STEEL WALL TILE

IDEAL FOR BATHS—KITCHENS—RECREATION ROOMS—NURSERIES—RESTAURANTS—BARS—HOTELS—OFFICES—DAIRIES—STORES—HOSPITALS, Etc.



Crown Tile is new. It is not a substitute for, but rather an improvement on tiles used in the past. Rich, colorful, long-life enamel scientifically fused onto rust resistant prime steel, gives to Crown Tile enduring, everlasting qualities.

Crown Tile will not crack, warp or fade. It will not peel, flake or rust. Crown Tile is manufactured to give lasting, colorful enjoyment and the satin smooth finish provides walls that are sanitary and easy to clean.

Crown Tile has as its base a specially treated heavy gauge rust resistant steel and is given a double coat of the highest quality enamel, applied by the most modern, scientifically tested principles. The baked-on surface is hard and non-porous. All that is ever required to restore the lustrous finish is a damp cloth — just wipe the grease and food stains away. Crown Tile is inexpensive. It can be easily and quickly installed on your present walls.

Crown Tile is embossed to almost twice the depth of other metal tiles to give it added strength and enhance its appearance on the wall.

Unlimited freedom of design is possible when Crown Tile is used. Sixteen distinctive colors, plus dull and bright Stainless Steel, all in three basic sizes, provide plenty of ammunition for creative imagination. For example there is the standard White, and the old standby, Ivory. Or if preferred — Jonquil Yellow or warm Peach — a Blush Pink — Sky Blue, Cherry Red, Deep Blue, Dubonnet and Black, and the Satin or Bright Stainless Steel finishes. Color galore selected by color experts to harmonize with modern fixtures and accessories—to blend perfectly with each other.

Crown Metal Wall Tile is the only wall tile whose manufacturer's **guarantee** is **bonded** against rusting, cracking, chipping, crazing or peeling, by a major insurance firm.

Prices and detailed specifications on request.



WHAT IS MATICO? MATICO is a carefully controlled blending of select thermoplastic asphaltic and/or resinous binders, high-grade asbestos fibres and fine, rich non-fade pigments. Ingredients are thoroughly machine-mixed and formed into sheets under pressure while hot. These sheets are precision cut to assure straight edges and square corners. Made from a special formulation, MATICO resists time and wear, is comfortable underfoot, and comes in rich, clear colors that are unmatched for beauty and true color values.

Ideal for Every Type of Installation. MATICO'S outstanding advantages make it first choice for schools, hospitals, office buildings, commercial areas, recreation centers, industrial plants, churches and private homes — in fact for every type of project.

Installs Easily, Quickly. Clean-cut edges and true right-angle corners make installation easier because MATICO Tiles butt closely when laid. In addition, MATICO seats quickly and lays flat without curling. Because MATICO can be walked on as soon as tiles are in place, installation can often be accomplished in commercial establishments without interference with business.

Fire Resistant. MATICO will not support combustion or ignite from surface. For this reason, MATICO is doubly desirable for use in schools and hospitals.

Gleams Like New. MATICO is easy and economical to keep sparkling clean, because it resists scuffs and mars — washes easily — shines like new with only occasional no-rub waxings.

Meets Federal Specifications. MATICO conforms to the rigid requirements of Federal Specification SS-T-306a for flexure, indentation, curling and impact.

Guaranteed. MATICO Asphalt Tile is guaranteed to meet the above Federal Specifications. Mastic Tile Corporation of America also guarantees that MATICO can be laid on, below or above grade, if applied in accordance with manufacturer's specifications.

DUPONT PRO-TEK



A greaseless cream which protects the hands from grime, grease, paint and many solvents. If rubbed on before starting work, it acts like an invisible glove. It washes off when the job is done and takes the dirt with it. Needed by mechanics, painters, factory workers, etc.

Cat. No.	Description	Size	Carton	Wt. Lbs. Carton	List Price
PT-8	Pro-Tek.....	8 Oz.	24	25	$0.50
PT-G	Pro-Tek.....	Gal.	4	34	4.50

DUPONT DUCO CEMENT



A transparent, flexible, waterproof cement for use on china, glass, wood, metal, leather, paper — everything except rubber. Requires no heating or mixing. Dries quickly and cements permanently. It has thousands of uses in the home, office and shop.

Cat. No.	Description	Size Ounce	Carton	Wt. Lbs. Carton	List Price
HC-L	"Duco" Cement.....	1¾	144	29	$0.30

DUPONT CELLULOSE SPONGES



A high-quality man-made sponge which is better than natural sponges. It is soft and free from grit, yet strong and durable. If floats — can be sterilized by boiling — holds 20 times its weight of water. Excellent for washing walls, windows, dishes, automobiles and the bath.

Cellulose Sponges—Coarse Pore

Cat. No.	Size, Inches	Size	Carton	Wt. Lbs. Carton	List Price
CS-4A	1 x3 x4½	No. 4A	144	8	$0.20
CS-6A	1⅛x3⅜x5⅛	No. 6A	144	12	.35
CS-8A	2 x4 x6	No. 8A	72	9	.70
CS-10A	2¼x4½x7¼	No. 10A	48	8	1.00

Colored Sponges

CS-6C	1⅛x3⅜x5½	No. 6C	72	7	.30

RULES FOR RESUSCITATION FROM ELECTRICAL SHOCK, USING THE PRONE PRESSURE METHOD

By Professor Shafer of Edinburgh, Scotland

Through courtesy of Public Service Company of Colorado and The National Electric Light Association

Efforts at resuscitation must be begun without a moment's delay, the instant the patient is freed from the contact. Accidental shocks seldom result fatally if the victim is aided immediately and the efforts to resuscitate continued.

If the body is in contact with a conductor, a dry stick of wood or a dry piece of clothing should be used to remove the conductor, or roll the body to one side. If the body is in contact with the earth, any loose or detached piece of clothing may be seized with impunity to draw it away from the conductor.

Directions

The Shafer, or "Prone Pressure" method.

I. The man is laid upon his stomach, face turned to one side, so that the mouth and nose do not touch the ground. See that the mouth contains no tobacco, spittle, or false teeth.

II. The operator kneels, straddling the patient's hips, facing the patient's head.

III. The operator places his spread hands upon the lower ribs of the patient and throws his own body and shoulders forward, so as to bring his weight heavily upon the lower ribs of the patient.

The operator's downward pressure should occupy about three seconds, or while he is counting six slowly; then his hands are suddenly removed, counting four before the downward pressure is resumed. Squeezing out the air in this manner creates a partial vacuum, and on release of pressure the air rushes into the lungs, the elasticity of the chest walls causing the chest to expand, giving the subject about twelve respirations per minute.

In all cases the efforts at resuscitation should be continued until the arrival of the physician. Any evidence of returning breathing should encourage the operator to continue his efforts. Artificial respiration should be continuous for one hour, much longer, if there are any evidences of returning animation.

First — Summon the Doctor at Once, Without Delay



Second — As soon as artificial respiration has been started, an assistant may loosen the clothing and collar, then hold a cloth saturated with aromatic spirits of ammonia near the nose. KEEP THE PATIENT WARM. The aromatic spirits of ammonia is more effective than the oxygen.

Third — No stimulants nor liquids of any kind should be administered by the mouth while respiration is suspended. KEEP BACK THE CROWD.

GRAPHICAL ELECTRICAL SYMBOLS FOR ARCHITECTURAL PLANS

GENERAL OUTLETS

Ceiling Wall

- Outlet.
- Blanked Outlet.
- Drop Cord.
- Electrical Outlet; for use only when circle used alone might be confused with columns, plumbing, symbols, etc.
- Fan Outlet.
- Junction Box.
- Lamp Holder.
- Lamp Holder with Pull Switch.
- Pull Switch.
- Outlet for Vapor Discharge Lamp.
- Exit Light Outlet.
- Clock Outlet. (Specify Voltage.)

CONVENIENCE OUTLETS

- Duplex Convenience Outlets.
- Convenience Outlet other than Duplex. 1=Single, 3=Triplex, etc.
- Weatherproof Convenience Outlet.
- Range Outlet.
- Switch and Convenience Outlet.
- Radio and Convenience Outlet.
- Special Purpose Outlet. (Des. in Spec.).
- Floor Outlet.

SWITCH OUTLETS

- S Single Pole Switch.
- S_2 Double Pole Switch.
- S_3 Three Way Switch.
- S_4 Four Way Switch.
- S_D Automatic Door Switch.
- S_E Electrolier Switch.
- S_K Key Operated Switch.
- S_P Switch and Pilot Lamp.
- S_{CB} Circuit Breaker.
- S_{WCB} Weatherproof Circuit Breaker.
- S_{MC} Momentary Contact Switch.
- S_{RC} Remote Control Switch.
- S_{WP} Weatherproof Switch.
- S_F Fused Switch.
- S_{WF} Weatherproof Fused Switch.

SPECIAL OUTLETS

a,b,c,etc

a,b,c,etc

S a,b,c,etc

Any Standard Symbol as given above with the addition of a lower case subscript letter may be used to designate some special variation of Standard Equipment of particular interest in a specific set of Architectural Plans.

When used they must be listed in the Key of Symbols on each drawing and if necessary further described in the specifications.

PANELS, CIRCUITS, AND MISCELLANEOUS

- Lighting Panel.
- Power Panel.
- Branch Circuit; Concealed in Ceiling or Wall.
- Branch Circuit; Concealed in Floor.
- Branch Circuit; Exposed.
- Home Run to Panel Board. Indicate number of Circuits by number of arrows. Note: Any circuit without further designation indicates a two-wire circuit. For a greater number of wires indicate as follows: /// (3 wires) //// (4 wires), etc.
- Feeders. Note: Use heavy lines and designate by number corresponding to listing in Feeder Schedule.
- Underfloor Duct and Junction Box. Triple System. Note: For double or single systems eliminate one or two lines. This symbol is equally adaptable to auxiliary system layouts.
- Generator.
- Motor.
- Instrument.
- Power Transformer. (Or draw to scale.)
- Controller.
- Isolating Switch.

AUXILIARY SYSTEMS

- Push Button.
- Buzzer.
- Bell.
- Annunciator.
- Outside Telephone.
- Interconnecting Telephone.
- Telephone Switchboard.
- Bell Ringing Transformer.
- D Electric Door Opener.
- F Fire Alarm Bell.
- F Fire Alarm Station.
- City Fire Alarm Station.
- FA Fire Alarm Central Station.
- FS Automatic Fire Alarm Device.
- W Watchman's Station.
- W Watchman's Central Station.
- H Horn.
- N Nurse's Signal Plug.
- M Maid's Signal Plug.
- R Radio Outlet.
- SC Signal Central Station.
- Interconnection Box.
- Battery.
- Auxiliary System Circuits. Note: Any line without further designation indicates a 2-Wire System. For a greater number of wires designate with numerals in manner similar to —,—12–No. 18W-¾" C., or designate by number corresponding to listing in Schedule.
- a,b,c Special Auxiliary Outlets. Subscription letters refer to notes on plans or detailed description in specifications.

(Symbols in accordance with American Standards Association Standard ASA Z32.9-1943.)

USEFUL INFORMATION

DEFINITIONS OF ELECTRICAL UNITS

All Electrical Units are Derived from the Following Mechanical Units:

The Centimeter is the Unit of Length, and Equals .3937 Inch, or .000000001 of a Quadrant of the Earth.

The Gram is the Unit of Mass, and is Equal to 15.432 Grains, the Mass of a Cubic Centimeter of Water at 4° C.

The Second is the Unit of Time and is the Time of One Swing of a Pendulum Swinging 86464.09 Times per Day, or the 1-86400th Part of a Mean Solar Day.

Ampere—Unit of Current Strength.—The Unit Strength of Current, Called the Ampere, is the Rate of Flow of Electricity Along a Conductor and is Analogous to the Rate of Flow of Water Through a Pipe. The Flow of Water Through a Pipe is Measured by the Amount which Flows per Second; In Electricity the Amount of Current is Measured also, but Instead of Gallons per Second, Coulombs per Second is Used. As the Expression of Coulombs per Second was Found Somewhat Cumbersome, the Name Ampere was Used; Thus 10 Coulombs per Second is just 10 Amperes.

Volt—Unit of Pressure.—The Flow of Electricity Depends upon Pressure the Same as Water in a Pipe Depends upon Pressure for its Flow. When Speaking of Water, Pressure is Termed as Pounds per Square Foot, but in Electricity, Pressure is Termed as Volts. When a Current of One Ampere Flows Through a Resistance of One Ohm the Pressure is One Volt. When a Conductor Cuts Lines of Magnetic Flux at the Rate of 100,000,000 per Second, a Pressure of One Volt is Produced.

Ohm—Unit of Resistance.—A Conductor has a Resistance of One Ohm when One Volt will Force a Current of One Ampere Through It. For Measuring very Small Resistances the Microhm is Used, which is One Millionth Part of an Ohm; For Very High Resistances, the Megohm is Used, which is One Million Times Larger than the Ohm.

Watt—Unit of Power.—In the Case of Water, the Rate of Flow is Termed as the Number of Gallons per Minute; in Electricity by the Number of Amperes or Coulombs per Second. The Power Required to Keep a Current of Water Flowing is the Product of the Current in Pounds per Minute by Head or Pressure in Feet. The Power Required to Keep a Current of Electricity Flowing is the Product of the Amperes Times the Pressure in Volts; this Gives the Power in Terms of Watts.

Kilowatt—1,000 Watts.—1.34 Horsepower.

Horsepower—A Rate of Doing Work Equal to 33,000 Pounds Raised One Foot in One Minute.

Coulomb—Unit of Quantity.—Amount of Electricity Passing in a Circuit in One Second when the Current is One Ampere.

Farad—Unit of Capacity.—A Capacity that will Contain One Coulomb at a Potential of One Volt.

Joule—Unit of Work.—The Work Done or Heat Generated by One Watt in One Second.

Circular Mil—Unit of Area.—The Area of a Circle with a Diameter of One Mil or One-thousandth Part of an Inch.

Unit Reluctance is Possessed by a Magnetic Path when Unit Magnetomotive Force will Cause Unit Flux to be Set Up.

Permeance of a Magnetic Circuit is a Measure of the Flux which will be Produced in the Circuit by a Given (Magnetomotive Force). It is a Reciprocal of Reluctance. A circuit having Unit Permeance will require unit (Magnetomotive Force) to Produce Unit Flux.

Permeability is the Ratio of Flux Density to Magnetizing Force.

Susceptibility is the Ratio of Intensity of Magnetization to Magnetizing Force.

Reluctivity or **Specific Reluctance** is the Reluctance of One Centimeter Cube of the Magnetic Path.

Unit Electromotive Force will Cause Unit Current to be Established in a Circuit of Unit Resistance.

Coefficient of Self-Induction of a Circuit is Proportional to that Value of Electromotive Force Produced in it by a Unit Rate of Variation of Current Through it. The Practical Unit is the Henry and Represents the Coefficient of a Circuit in which the Rate of Change of Current of One Ampere per Second will Generate One Volt of Electromotive Force in the Circuit.

Resistivity or **Specific Resistance** is the Resistance of One Centimeter Cube of Conductor.

Conductivity is the Reciprocal of Resistivity.

Conductance is the Reciprocal of Resistance.

Magnetomotive Force—The Force which Produces Magnetic Flux.

OHM'S LAW

Ohm's Law is a Method of Expressing Relationship Existing Between Electromotive Force (Voltage), Current (Amperage) and Resistance (Ohms), and is the Practical Basis of Most Electrical Computations.

Current Flow Equals the Electromotive Force Divided by the Resistance.

$$\text{Current Flow} = \frac{\text{Electromotive Force}}{\text{Resistance}} \text{ or } C = \frac{E}{R}$$

Electromotive Force Equals the Current Flow Multiplied by the Resistance.

Electromotive Force=Current Flow x Resistance or $E = C \times R$.

Resistance Equals the Electromotive Force Divided by the Current Flow.

$$\text{Resistance} = \frac{\text{Electromotive Force}}{\text{Current Flow}} \text{ or } R = \frac{E}{C}$$

Electromotive Force Varies Directly as the Current and Resistance.

Resistance Varies Directly with the Electromotive Force and Inversely as the Current.

Current Varies Directly with the Electromotive Force and Inversely as the Resistance.

The "Mil," Whose Expressed Value is $\frac{\text{one}}{\text{one-thousandth}}$ (.001) of an Inch, is the Practical Basis for Determining the Diameters and Thereby the Areas of all Wires Used as Electric Conductors. The Diameter being Given, the Area is Obtained by the Well-known Rule, "the Area of a Circle, in Circular Units, is Equal to the Square of its Diameter," Hence the Square of the Diameter of a Wire Expressed in Mils Equals the Area of its Cross Section. $D^2 = A$, which Area is Expressed in Circular Mils or CM; hence, $D^2 = CM$.

EXCERPTS FROM 1951 CODE

TABLE 1—ALLOWABLE CURRENT-CARRYING CAPACITIES OF INSULATED CONDUCTORS IN AMPERES
Not More Than Three Conductors in Raceway or Cable
(Based on Room Temperatures of 30 C. 86 F.)

Size AWG MCM	Rubber Type R Type RW Type RU Type RUW (14-2) / Thermoplastic Type T Type TW	Rubber Type RH	Paper / Thermoplastic Asbestos Type TA / Var-Cam Type V / Asbestos Var-Cam Type AVB	Asbestos Var-Cam Type AVA Type AVL	Impregnated Asbestos Type AI 14-8 Type AIA	Asbestos Type A 14-8 Type AA
14	15	15	25	30	30	30
12	20	20	30	35	40	40
10	30	30	40	45	50	55
8	40	45	50	60	65	70
6	55	65	70	80	85	95
4	70	85	90	105	115	120
3	80	100	105	120	130	145
2	95	115	120	135	145	165
1	110	130	140	160	170	190
0	125	150	155	190	200	225
00	145	175	185	215	230	250
000	165	200	210	245	265	285
0000	195	230	235	275	310	340
250	215	255	270	315	335	..
300	240	285	300	345	380	.
350	260	310	325	390	420	..
400	280	335	360	420	450	...
500	320	380	405	470	500	..
600	355	420	455	525	545	..
700	385	460	490	560	600	..
750	400	475	500	580	620	..
800	410	490	515	600	640	..
900	435	520	555	.	...	..
1,000	455	545	585	680	730	..
1,250	495	590	645	..	...	..
1,500	520	625	700	785	...	...
1,750	545	650	735	...	...	...
2,000	560	665	775	840	..	..

Correction Factor for Room Temperatures Over 30 C. 86 F.

C.	F.						
40	104	.82	.88	.90	.94	.95	.
45	113	.71	.82	.85	.90	.92	..
50	122	.58	.75	.80	.87	.89	..
55	131	.41	.67	.74	.83	.86	..
60	140	...	.58	.67	.79	.83	.91
70	158	...	.35	.52	.71	.76	.87
75	167	...	...	.43	.66	.72	.86
80	176	..	..	.30	.61	.69	.84
90	194	...	..	..	.50	.61	.80
100	212	...	...	...	...	.51	.77
120	248	...	...	...	..	...	.69
140	284	...	...	..	..	...	.59

TABLE 2—ALLOWABLE CURRENT-CARRYING CAPACITIES OF INSULATED CONDUCTORS IN AMPERES
Single Conductor in Free Air
(Based on Room Temperature of 30 C. 86 F.)

Size AWG MCM	Rubber Type R Type RW Type RU Type RUW (14-2) / Thermoplastic Type T Type TW	Rubber Type RH	Thermoplastic Asbestos Type TA / Var-Cam Type V / Asbestos Var-Cam Type AVB	Asbestos Var-Cam Type AVA Type AVL	Impregnated Asbestos Type AI (14-8) Type AIA	Asbestos Type A (14-8) Type AA	Slow Burning Type SB / Weather-proof Type WP Type SBW
14	20	20	30	40	40	45	30
12	25	25	40	50	50	55	40
10	40	40	55	65	70	75	55
8	55	65	70	85	90	100	70
6	80	95	100	120	125	135	100
4	105	125	135	160	170	180	130
3	120	145	155	180	195	210	150
2	140	170	180	210	225	240	175
1	165	195	210	245	265	280	205
0	195	230	245	285	305	325	235
00	225	265	285	330	355	370	275
000	260	310	330	385	410	430	320
0000	300	360	385	445	475	510	370
250	340	405	425	495	530	....	410
300	375	445	480	555	590	....	460
350	420	505	530	610	655	....	510
400	455	545	575	665	710	....	555
500	515	620	660	765	815	....	630
600	575	690	740	855	910	....	710
700	630	755	815	940	1005	....	780
750	655	785	845	980	1045	....	810
800	680	815	880	1020	1085	....	845
900	730	870	940	....	....	....	905
1000	780	935	1000	1165	1240	....	965
1250	890	1065	1130	....	....	....	....
1500	980	1175	1260	1450	....	....	1215
1750	1070	1280	1370	....	....	....	....
2000	1155	1385	1470	1715	....	....	1405

Correction Factor for Room Temperatures Over 30 C. 86 F.

C.	F.							
40	104	.82	.88	.90	.94	.95	....	....
45	113	.71	.82	.85	.90	.92	....	....
50	122	.58	.75	.80	.87	.89	....	....
55	131	.41	.67	.74	.83	.86	....	....
60	140	....	.58	.67	.79	.83	.91	....
70	158	....	.35	.52	.71	.76	.87	....
75	167	....	....	.43	.66	.72	.86	....
80	176	....	....	.30	.61	.69	.84	....
90	194	....	....	....	.50	.61	.80	....
100	212	....	....	....	....	.51	.77	....
120	248	....	....	....	....	....	.69	....
140	284	....	....	....	....	....	.59	....

NOTE TO ABOVE TABLES

For explanation of Type Letters, and for recognized size of conductors for the various conductor insulations, see sections 3102 and 93101. For installation requirements, see section 3102, and the various artices of this code. For flexible cords see Tables 3 and 31.

1. Aluminum Conductors. For aluminum conductors, the allowable current-carrying capacities shall be taken as 84 per cent of those given in the table for the respective sizes of copper conductor with the same kind of insulation.

2. Bare Conductors. If bare conductors are used with insulated conductors, their allowable current-carrying capacity shall be limited to that permitted for the insulated conductor with which they are used.

3. Application of Table. For open wiring on insulators and for concealed knob-and-tube work, the allowable current-carrying capacities of Table 2 shall be used. For all other recognized wiring methods, the allowable current-carrying capacities of Table 1 shall be used, unless otherwise provided in this code.

4. More Than Three Conductors in a Raceway. Table 1 gives the allowable current-carry capacity for not more than three conductors in a raceway or cable. If the number of conductors in a raceway or cable is from 4 to 6, the allowable current-carrying capacity of each conductor shall be reduced to 80 per cent of the values in Table 1. If the number of conductors in a raceway or cable is from 7 to 9, the allowable current-carrying capacity of each conductor shall be reduced to 70 per cent of the values in Table 1.

Exceptions to the foregoing are specified in NEC sections 3624, 3745, and 7265.

5. Neutral Conductor. A neutral conductor which carries only the unbalanced current from other conductors, as in the case of normally balanced circuits of three or more conductors, shall not be counted in determining current-carrying capacities as provided for in the preceding paragraph.

In a 3-wire circuit consisting of two phase wires and the neutral of a 4-wire 3-phase system, a common conductor carries approximately the same current as the other conductors and is not therefore considered as a neutral conductor.

6. Ultimate Insulation Temperature. In no case shall conductors be associated together in such a way with respect to the kind of circuit, the wiring method employed, or the number of conductors, that the limiting temperature of the conductors will be exceeded.

7. Use of Conductors With Higher Operating Temperatures. If the room temperature is within 10 degrees C. of the maximum allowable operating temperature of the insulation, it is desirable to use an insulation with a higher maximum allowable operating temperature; although insulation can be used in a room temperature approaching its maximum allowable operating temperature limit if the current is reduced in accordance with the table of correction factors for different room temperatures.

8. Voltage Drop. The allowable current-carrying capacities in Tables 1 and 2 are based on temperature alone and do not take voltage drop into consideration.

9. Overcurrent Protection. If the standard ratings and settings of overcurrent devices do not correspond with the ratings and settings allowed for conductors, the next higher standard rating and setting may be used, but not exceeding 150 per cent of the allowable carrying capacity of the conductor.

10. Deterioration of Insulation. It should be noted that even the best grades of rubber insulation will deteriorate in time, so eventually will need to be replaced.

EXCERPTS FROM 1951 CODE

NOMINAL WALL OF INSULATION FOR VARIOUS COMPOUNDS

Conductor Size	New Type R	New Type RW	Type RH	Type T	Type TW	Type RU
14	2/64	3/64	2/64	2/64	2/64	13 mils
12	2/64	3/64	2/64	2/64	2/64	18 mils
10	3/64	3/64	3/64	2/64	2/64	18 mils
8	4/64	4/64	4/64	3/64	3/64	25 mils
6	4/64	4/64	4/64	4/64	4/64	25 mils
4	4/64	4/64	4/64	4/64	4/64	Not permitted
3	4/64	4/64	4/64	4/64	4/64	
2	4/64	4/64	4/64	4/64	4/64	
1	5/64	5/64	5/64	5/64	5/64	
1/0	5/64	5/64	5/64	5/64	5/64	
2/0	5/64	5/64	5/64	5/64	5/64	
3/0	5/64	5/64	5/64	5/64	5/64	
4/0	5/64	5/64	5/64	5/64	5/64	
250,000 to 2,000,000	Same as at present			Not recognized pending establishment of suitable standards.		
	Same as at present			Not recognized pending establishment of suitable standards.		

DIMENSIONS OF CONDUCTORS

Building Wire, Type R and RH

Size AWG-CM	Approx. Diam. Inches	Approx. Area Sq. Ins.	Size CM	Approx. Diam. Inches	Approx. Area Sq. Ins.
14	.162	.0206	450,000	1.08	.91
12	.179	.0252	500,000	1.12	.99
10	.24	.045	550,000	1.17	1.08
8	.30	.071	600,000	1.22	1.16
6	.41	.13	650,000	1.25	1.23
4	.45	.16	700,000	1.29	1.30
2	.52	.21	750,000	1.33	1.38
1	.59	.27	800,000	1.36	1.45
0	.63	.31	850,000	1.39	1.52
00	.67	.35	900,000	1.43	1.60
000	.72	.41	950,000	1.46	1.68
0000	.78	.48	1,000,000	1.49	1.75
250,000	.86	.58	1,250,000	1.68	2.22
300,000	.92	.67	1,500,000	1.79	2.52
350,000	.98	.75	1,750,000	1.90	2.85
400,000	1.03	.83	2,000,000	2.00	3.14

Synthetic Insulation, Type T, TW

Latex Insulation, Type RU

Size Awg.	Approx. Diam. in Inches	Approx. Area in Sq. In.
14	.130	.0133
12	.147	.170
10	.168	.0220
8	.227	.0405
6	.314	.0775
4	.363	.1035
2	.423	.1405
1	.496	.1935
0	.537	.226
00	.583	.267
000	.634	.316
0000	.692	.376

Note—Latex insulation, Type RU, recognized in size No. 14 to 6 incl. only.

NUMBER OF CONDUCTORS IN CONDUIT OR TUBING

Rubber Covered, Types RF-32, RUF, R, RH, RW, RU, and RUW. Thermoplastic, Types TF, T and TW
One to Nine Conductors

Size AWG MCM	Number of Conductors in One Conduit or Tubing								
	1	2	3	4	5	6	7	8	9
18	½	½	½	½	½	½	½	¾	¾
16	½	½	½	½	½	½	¾	¾	¾
14	½	½	½	½	¾	¾	1	1	1
12	½	½	½	¾	¾	1	1	1	1¼
10	½	¾	¾	¾	1	1	1	1¼	1¼
8	½	¾	¾	1	1¼	1¼	1¼	1½	1½
6	½	1	1	1¼	1½	1½	2	2	2
4	½	1¼	*1¼	1½	1½	2	2	2	2½
3	¾	1¼	1¼	1½	2	2	2	2½	2½
2	¾	1¼	1¼	2	2	2	2½	2½	2½
1	¾	1½	1½	2	2½	2½	2½	3	3
0	1	1½	2	2	2½	2½	3	3	3
00	1	2	2	2½	2½	3	3	3	3½
000	1	2	2	2½	3	3	3	3½	3½
0000	1¼	2	2½	3	3	3	3½	3½	4
250	1¼	2½	2½	3	3	3½	4	4	4½
300	1¼	2½	2½	3	3½	4	4	4½	4½
350	1¼	3	3	3½	3½	4	4½	4½	5
400	1½	3	3	3½	4	4	4½	5	5
500	1½	3	3	3½	4	4½	5	5	6
600	2	3½	3½	4	4½	5	6	6	6
700	2	3½	3½	4½	5	5	6	6	...
750	2	3½	3½	4½	5	6	6	6	...
800	2	3½	4	4½	5	6	6	...	...
900	2	4	4	5	6	6	6	...	...
1000	2	4	4	5	6	6	...	...	...
1250	2½	4½	4½	6	6	...	...	...	...
1500	3	5	5	6	...	...	...	...	...
1750	3	5	6	6	...	...	...	...	...
2000	3	6	6	...	...	...	...	...	...

* Where a service run of conduit or electrical metallic tubing does not exceed 50 feet in length and does not contain more than the equivalent of two quarter bends from end to end two No. 4 insulated and one No. 4 bare conductors may be installed in 1-inch conduit or tubing.

MORE THAN NINE CONDUCTORS

Size A.W.G.	¾ Inch	1 Inch	1¼ Inch	1½ Inch	2 Inch	2½ Inch	3 Inch
18	12	20	35	49	80	115	176
16	10	17	30	41	68	97	150
14	..	10	18	25	40	59	90
12	..	..	15	21	35	50	77
10	..	..	13	17	29	41	64
8	..	..	..	10	17	25	38
6	..	..	..	..	..	15	23

More than nine conductors are permitted in a single conduit for conductors between a motor and its controller; stage pocket and border circuits, section 5212; sign flashers, section 6012-d; elevator control conductors, section 6214.

MAXIMUM PERMISSIBLE AREA
Conduit Fill in %

Nature of Conductor or Installation	No. of Conductors				
	1	2	3	4	Over 4
Standard Conductors (Not Lead Covered)	53	31	43	40	40
Lead Covered Conductors	55	30	40	38	35
For rewiring only existing raceways where structural or other considerations do not permit use of larger conduit.	60	40	50	50	50

It is important to remember that the larger percentage conduit fill is permissible **only** for rewiring and is **not** applicable when used for **new wiring.**

The maximum number of conductors permitted in a conduit for new work is definitely governed by Tables in the 1951 Code. The only one who may change this rule is the local inspector in a given territory.

The tabulated diameter and area figures for conductors, conduit and tubing listed in proceding pages are the ones listed in the 1951 Code. Upon these figures will be based the calculations to determine the sum of the cross sectional areas of the individual conductors, so that they will not be greater than the percentage of the interior cross sectional area of the conduit or tubing.

USEFUL INFORMATION

National Electrical Code—1951

TABLE 20—CONDUCTOR SIZES AND OVERCURRENT PROTECTION FOR MOTORS

Full load current rating of motor amperes	Minimum size conductor in raceways For conductors in air or for other insulations see tables 1 and 2 AWG and MCM 1951 Code		For Running Protection of Motors****		Maximum Allowable Rating or Setting of Branch Circuit Protective Devices			
			Maximum rating of non-adjustable protective devices	Maximum setting of adjustable protective devices	WITH CODE LETTERS Single-phase and squirrel cage and synchronous. Full voltage, resistor and reactor starting, Code letters F to V inc. WITHOUT CODE LETTERS Same as above.	WITH CODE LETTERS Single-phase and squirrel cage and synchronous. Full voltage, resistor and reactor starting, Code letters B to E inc. Auto-transformer starting Code letters F to V inc. WITHOUT CODE LETTERS Squirrel cage and synchronous, auto-transformer starting, High reactance squirrel cage.*** Both not more than 30 amperes	WITH CODE LETTERS Squirrel cage and synchronous auto-transformer starting, Code letters B to E inc. WITHOUT CODE LETTERS Squirrel cage and synchronous, auto-transformer starting, High reactance squirrel cage.*** Both more than 30 amperes.	WITH CODE LETTERS All motors. Code letter A. WITHOUT CODE LETTERS DC and wound-rot. motors
	Type R Type T	Type RH	Amperes	Amperes				
Col. No. 1	2	3	5	6	7	8	9	10
1**	14	14	2*	1.25*	15	15	15	15
2**	14	14	3*	2.50*	15	15	15	15
3**	14	14	4*	3.75*	15	15	15	15
4**	14	14	6*	5.0*	15	15	15	15
5**	14	14	8*	6.25*	15	15	15	15
6**	14	14	8*	7.50*	20	15	15	15
7	14	14	10*	8.75*	25	20	15	15
8	14	14	10*	10.0*	25	20	20	15
9	14	14	12*	11.25*	30	25	20	15
10	14	14	15*	12.50*	30	25	20	15
11	14	14	15*	13.75*	35	30	25	20
12	14	14	15	15.00	40	30	25	20
13	12	12	20	16.25	40	35	30	20
14	12	12	20	17.50	45	35	30	25
15	12	12	20	18.75	45	40	30	25
16	12	12	20	20.00	50	40	35	25
17	10	10	25	21.25	60	45	35	30
18	10	10	25	22.50	60	45	40	30
19	10	10	25	23.75	60	50	40	30
20	10	10	25	25.0	60	50	40	30
22	10	10	30	27.50	70	60	45	35
24	10	10	30	30.00	80	60	50	40
26	8	10	35	32.50	80	70	60	40
28	8	10	35	35.00	90	70	60	45
30	8	8	40	37.50	90	70	60	45
32	8	8	40	40.00	100	80	70	50
34	6	8	45	42.50	110	90	70	60
36	6	8	45	45.00	110	90	80	60
38	6	6	50	47.50	125	100	80	60
40	6	6	50	50.00	125	100	80	60
42	6	6	50	52.50	125	110	90	70
44	6	6	60	55.0	125	110	90	70
46	4	6	60	57.50	150	125	100	70
48	4	6	60	60.0	150	125	100	80
50	4	6	60	62.50	150	125	100	80
52	4	6	70	65.0	175	150	110	80
54	4	4	70	67.50	175	150	110	90
56	4	4	70	70.00	175	150	120	90
58	3	4	70	72.50	175	150	120	90
60	3	4	80	75.00	200	150	120	90
62	3	4	80	77.50	200	175	125	100

USEFUL INFORMATION

TABLE 20—CONDUCTOR SIZES AND OVERCURRENT PROTECTION FOR MOTORS, Continued

National Electrical Code—1951

Col. No. 1	Type R Type T 2	Type RH 3	Amperes 5	Amperes 6	7	8	9	10
64	3	4	80	80.00	200	175	150	100
66	2	4	80	82.50	200	175	150	100
68	2	4	90	85.00	225	175	150	110
70	2	3	90	87.50	225	175	150	110
72	2	3	90	90.00	225	200	150	110
74	2	3	90	92.50	225	200	150	125
76	2	3	100	95.00	250	200	175	125
78	1	3	100	97.50	250	200	175	125
80	1	3	100	100.00	250	200	175	125
82	1	2	110	102.50	250	225	175	125
84	1	2	110	105.00	250	225	175	150
86	1	2	110	107.50	300	225	175	150
88	1	2	110	110.00	300	225	200	150
90	0	2	110	112.50	300	225	200	150
92	0	2	125	115.00	300	250	200	150
94	0	1	125	117.50	300	250	200	150
96	0	1	125	120.00	300	250	200	150
98	0	1	125	122.50	300	250	200	150
100	0	1	125	125.00	300	250	200	150
105	00	1	150	131.5	350	300	225	175
110	00	0	150	137.5	350	300	225	175
115	00	0	150	144.0	350	300	250	175
120	000	0	150	150.0	400	300	250	200
125	000	00	175	156.5	400	350	250	200
130	000	00	175	162.5	400	350	300	200
135	0000	00	175	169.0	450	350	300	225
140	0000	00	175	175.0	450	350	300	225
145	0000	000	200	181.5	450	400	300	225
150	0000	000	200	187.5	450	400	300	225
155	0000	000	200	194.0	500	400	350	250
160	250	000	200	200.0	500	400	350	250
165	250	0000	225	206.	500	450	350	250
170	250	0000	225	213.	500	450	350	300
175	300	0000	225	219.	600	450	350	300
180	300	0000	225	225.	600	450	400	300
185	300	0000	250	231.	600	500	400	300
190	300	250	250	238.	600	500	400	300
195	350	250	250	244.	600	500	400	300
200	350	250	250	250.	600	500	400	300
210	400	300	250	263.	.....	600	450	350
220	400	300	300	275.	.....	600	450	350
230	500	300	300	288.	.....	600	500	350
240	500	350	300	300.	.....	600	500	400
250	500	350	300	313.	.....	.....	500	400
260	600	400	350	325.	.....	.....	600	400
270	600	400	350	338.	.....	.....	600	450
280	600	500	350	350.	.....	.....	600	450
290	700	500	350	363.	.....	.....	600	450
300	700	500	400	375.	.....	.....	600	450
320	750	600	400	400.	.....	.....	.....	500
340	900	600	450	425.	.....	.....	.....	600
360	1000	700	450	450.	.....	.....	.....	600
380	1250	750	500	475.	.....	.....	.....	600
400	1500	900	500	500.	.....	.....	.....	600
420	1750	1000	600	525.	.....	.....	.....	.....
440	2000	1250	600	550.	.....	.....	.....	.....
460	.....	1250	600	575.	.....	.....	.....	.....
480	.....	1500	600	600.	.....	.....	.....	.....
500	.....	1500	.....	625.	.....	.....	.....	.....

*For running protection of motors of 1 horsepower or less, see section 4322.
**For the grouping of small motors under the protection of a single set of fuses, see section 4343.
***High-reactance squirrel-cage motors are those designed to limit the starting current by means of deep-slot secondaries or double-wound secondaries and are generally started on full voltage.
****For the running protection of motors, see section 4322.

APPLICATION OF THERMAL CIRCUIT BREAKERS AND FUSIBLE DEVICES

THE PRIMARY FUNCTION OF AN OVERCURRENT PROTECTIVE DEVICE for conductors is to guard the conductor against overheating. The current-carrying ability of a conductor is limited by the temperature at which its insulation may be operated safely. The operating temperature is the sum of the ambient temperature plus the temperature rise due to loss in the conductor. To limit this total temperature, the National Electrical Code requires that conductor be derated at ambient temperatures above 30°C, the amount of derating depending upon the type of insulation used.

The ideal overcurrent protective device is one which likewise must be derated at elevated ambient temperatures and one in which the derating closely parallels the derating of the protected conductor. This applies to fuses as well as to circuit breakers.

Operating on the thermal principle, all thermal breakers are affected by changes in ambient temperature, thereby taking into account the decrease in conductor capacity at elevated ambient temperatures.

IN APPLYING OVERCURRENT DEVICES, either circuit breakers or fuses which depend upon heat for their operation, it must be remembered that such devices are calibrated at an ambient temperature specified by the Underwriters' Laboratories. In the case of circuit breakers this is 25°C (77°F). For other ambient temperatures the current rating of thermal breakers varies from the rating at 25°C ambient.

While thermal circuit breakers are tested by the Underwriters' Laboratories at 25°C ambient, and are tested individually and in the open they are seldom actually applied in this manner. They are usually mounted in individual enclosures, combination linestarters, panelboards, or enclosed switchboards. In applying enclosed protective devices of the thermal type, consideration must be given not only to the ambient temperature in which the enclosure is mounted, but also to the temperature within the enclosure itself.

It is impossible to provide a simple derating factor that will cover accurately the various enclosures. The increase in temperature inside the enclosure is caused by several factors—such as the losses in the device itself, losses in other apparatus and conductors within the enclosure. In the case of a panelboard, variables are introduced by the number of circuits, gutter space and number of conductors in the cabinet.

WHEN THE CONDUCTORS ARE SELECTED, good engineering practice dictates that the capacity of the conductor be at least 125% of full load current. The National Electrical Code requires this for individual motor branch circuits and for other branch circuits supplying continuous loads.

APPLICATION—The panelboard standards (42-82) of the National Electrical Manufacturers Association recommend that circuits be loaded to not exceed 70% of the protective device rating. This means that in panelboards the conductor and overcurrent protective device rating should be not less than 142% of the load. For fusible safety switches the standards of the National Electrical Manufacturers Association recommend that on continuous duty circuits the switch should be selected to have a current rating at least 150% of the load. If the practices recommended above are followed, Westinghouse thermal breakers will in normal applications operate satisfactorily in an enclosure with normal outside ambient temperatures, provided a breaker is selected having a rating equal to that of the conductor. The factor of 125% in the case of individually enclosed breakers or 142% in the case of panelboards will in general take care of the difference in ambient temperatures inside and outside the enclosure. Therefore, enclosed breakers should be applied using these factors and the ambient temperatures outside the enclosure. Enclosed thermal protective devices should not be mounted in direct sun or other exceptionally warm locations where additional heat will be absorbed into the enclosure, unless special consideration is given to derating.

UNDERWRITERS' LABORATORIES REQUIREMENTS

A summary of the Underwriters' requirements and tests under which standard breakers are listed follows:

1. The tripping mechanism shall be enclosed to prevent tampering.

2. The mechanism shall trip free of the handle on overload.

3. The breaker must trip on 200 per cent rating within a specified time.

4. The breaker must trip on 125 per cent rating within a specified time.

5. Overload tests:
   The breaker must operate satisfactorily 50 times on 600 per cent rating at 50 per cent power factor and rated voltage (150 amperes is the minimum current permissible on this test).

6. All breakers rated 50 amperes, 250 volts a-c, and less, must operate four times at two-minute intervals without tripping or welding of contacts on a tungsten lamp load equal to the rating of the breaker.

7. The breaker must carry 100 per cent load continuously, and must not exceed specified temperature limits.

8. Endurance test:

AMPERE RATING	OPERATIONS FULL LOAD	OPERATIONS NO LOAD	OPERATIONS PER MINUTE
0–100	6000	4000	6
101–225	4000	4000	5
226–600	1000	5000	4

9. A recalibration test at 200 per cent and 125 per cent as outlined above.

10. Short-circuit test:
    The breaker is given a minimum of 3 short-circuit tests per pole on the following circuits:

BREAKER RATING			TEST CIRCUIT	
VOLTS	AMPERES	VOLTS	AMPERES	A-C P.F.
250 & under	100 & under	Rated	5,000	45 to 50%
250 & under	Over 100	Rated	10,000	45 to 50%
Over 250	All	Rated	10,000	45 to 50%

D-c tests same as a-c except on noninductive load.

11. Tripping time at 200 per cent of full load rating after short-circuit test.

12. Insulation test:
    1000 volts plus twice rated voltage between live parts and ground—between poles with the breaker closed and between line and load terminals with the breaker open.

NATIONAL ELECTRICAL CODE APPLICATION DATA

TABLE FOR SELECTING SWITCH, CIRCUIT BREAKER, WIRE AND FUSE SIZES FOR MOTOR BRANCH CIRCUITS

(Adapted from 1951 N.E. Code Chapter 10. Obtain proper terminal ampere rating of motor from horsepower.)

FULL LOAD CURRENT RATING OF MOTOR		TO SELECT PROPER SIZE FUSE, SAFETY SWITCH OR CIRCUIT BREAKER FOR MOTOR CIRCUIT									WIRE SIZE	
		FUSIBLE SWITCH OR ABI BREAKER SIZE FOR CIRCUIT PROTECTION COLUMNS 4, 6 AND 8 RECOMMENDED RATING OF BRANCH CIRCUIT BREAKER AMPERES BASED ON 20 SECONDS ACCELERATING TIME†										
		SINGLE PHASE, SQUIRREL-CAGE AND SYNCHRONOUS FULL-VOLTAGE, REACTOR AND RESISTOR STARTING			SQUIRREL-CAGE AND SYNCHRONOUS AUTO-TRANSFORMER STARTING, HIGH-REACTANCE SQUIRREL-CAGE WITHOUT CODE MARKING			A-C WOUND ROTOR AND DIRECT CURRENT			MINIMUM SIZE CONDUCTOR IN RACEWAYS AWG AND MCM	
1	2	3	4		5	6		7	8		9	10
AMP	NON-FUSIBLE SWITCH SIZE AMP	MAX. ALLOWABLE RATING OF BRANCH CIRCUIT FUSES AMP	FUSIBLE SWITCH AMP	CIRCUIT BREAKER AMP	MAX. ALLOWABLE RATING OF BRANCH CIRCUIT FUSES AMP	FUSIBLE SWITCH AMP	CIRCUIT BREAKER AMP	MAX. ALLOWABLE RATING OF BRANCH CIRCUIT FUSES AMP	FUSIBLE SWITCH AMP	CIRCUIT BREAKER AMP	TYPES R, RW, RU, T, AND TW	TYPE RH
1	Non-fusible Safety Switches for Motor Circuits should be applied according to the 1947 National Electrical Code, Sections 4401 to 4411 inclusive, or to a later edition	15	30	15	15	30	15	15	30	15	14	14
2		15	30	15	15	30	15	15	30	15	14	14
3		15	30	15	15	30	15	15	30	15	14	14
4		15	30	15	15	30	15	15	30	15	14	14
5		15	30	15	15	30	15	15	30	15	14	14
6		20	30	15	15	30	15	15	30	15	14	14
7		25	30	15	20	30	15	15	30	15	14	14
8		25	30	20	20	30	20	15	30	15	14	14
9		30	30	20	25	30	20	15	30	15	14	14
10		30	30	25	25	30	20	15	30	20	14	14
11		35	60	25	30	30	25	20	30	20	14	14
12		40	60	25	30	30	25	20	30	20	14	14
13		40	60	35	35	60	35	20	30	25	12	12
14		45	60	35	35	60	35	25	30	25	12	12
15		45	60	35	40	60	35	25	30	25	12	12
16		50	60	35	40	60	35	25	30	25	12	12
17		60	60	50	45	60	35	30	30	35	10	10
18		60	60	50	45	60	35	30	30	35	10	10
19		60	60	50	50	60	35	30	30	35	10	10
20		60	60	50	50	60	35	30	30	35	10	10
22		70	100	50	60	60	50	35	60	35	10	10
24		80	100	50	60	60	50	40	60	50	10	10
26		80	100	50	70	100	50	40	60	50	8	10
28		90	100	50‡	70	100	50	45	60	50	8	10
30		90	100	50‡	70	100	50	45	60	50	8	8
32		100	100	70	70	100	50	50	60	50	8	8
34		110	200	70	70	100	70	60	60	70	6	8
36		110	200	70	80	100	70	60	60	70	6	8
38		125	200	70	80	100	70	60	60	70	6	6
40		125	200	70	80	100	70	60	60	70	6	6
42		125	200	70	90	100	70	70	100	70	6	6
44		125	200	70	90	100	70	70	100	70	6	6
46		150	200	70	100	100	70	70	100	70	4	6
48		150	200	90	100	100	90	80	100	90	4	6
50		150	200	90	100	100	90	80	100	90	4	6
52		175	200	90	110	200	90	80	100	90	4	6
54		175	200	90	110	200	90	90	100	90	4	4
56		175	200	90	120	200	90	90	100	90	4	4
58		175	200	90	120	200	90	90	100	90	3	4
60		200	200	90	120	200	90	90	100	90	3	4
62		200	200	100	125	200	100	100	100	100	3	4
64		200	200	100	150	200	100	100	100	100	3	4
66		200	200	100	150	200	100	100	100	100	2	4
68		225	400	125	150	200	125	110	200	125	2	4
70		225	400	125	150	200	125	110	200	125	2	3
72		225	400	125	150	200	125	110	200	125	2	3
74		225	400	125	150	200	125	125	200	125	2	3
76		250	400	125	175	200	125	125	200	125	2	3
78		250	400	125	175	200	125	125	200	125	1	3

† Applications having unusually long starting period or frequent starting refer to Works for proper size breaker. High or low ambients affect rating of breakers.

‡ Does not allow more than 8 seconds starting time.

NATIONAL ELECTRICAL CODE APPLICATION DATA

TABLE FOR SELECTING SWITCH, CIRCUIT BREAKER, WIRE AND FUSE SIZES FOR MOTOR BRANCH CIRCUITS

(Adapted from 1951 N.E. Code Chapter 10. Obtain proper terminal ampere rating of motor from horsepower.)

FULL LOAD CURRENT RATING OF MOTOR		TO SELECT PROPER SIZE FUSE, SAFETY SWITCH OR CIRCUIT BREAKER FOR MOTOR CIRCUIT									WIRE SIZE	
		FUSIBLE SWITCH OR ABI BREAKER SIZE FOR CIRCUIT PROTECTION COLUMNS 4, 6 AND 8 RECOMMENDED RATING OF BRANCH CIRCUIT BREAKER AMPERES BASED ON 20 SECONDS ACCELERATING TIME†										
		SINGLE PHASE, SQUIRREL-CAGE AND SYNCHRONOUS FULL-VOLTAGE, REACTOR AND RESISTOR STARTING.			SQUIRREL-CAGE AND SYNCHRONOUS AUTO-TRANSFORMER STARTING. HIGH-REACTANCE SQUIRREL-CAGE			A-C WOUND ROTOR AND DIRECT CURRENT			MINIMUM SIZE CONDUCTOR IN RACEWAYS AWG AND MCM	
1	2	3	4		5	6		7	8		9	10
AMP	NON-FUSIBLE SWITCH SIZE AMP	MAX. ALLOWABLE RATING OF BRANCH CIRCUIT FUSES AMP	FUSIBLE SWITCH AMP	CIRCUIT BREAKER AMP	MAX. ALLOWABLE RATING OF BRANCH CIRCUIT FUSES AMP	FUSIBLE SWITCH AMP	CIRCUIT BREAKER AMP	MAX. ALLOWABLE RATING OF BRANCH CIRCUIT FUSES AMP	FUSIBLE SWITCH AMP	CIRCUIT BREAKER AMP	TYPES R, RW, RU, T, AND TW	TYPE RH
80		250	400	125	175	200	125	125	200	125	1	3
82		250	400	125	175	200	125	125	200	125	1	2
84		250	400	150	175	200	150	150	200	150	1	2
86		300	400	150	175	200	150	150	200	150	1	2
88		300	400	150	200	200	150	150	200	150	1	2
90		300	400	150	200	200	150	150	200	150	0	2
92		300	400	150	200	200	150	150	200	150	0	2
94		300	400	150	200	200	150	150	200	150	0	1
96		300	400	150	200	200	150	150	200	150	0	1
98		300	400	150	200	200	150	150	200	150	0	1
100		300	400	150	200	200	150	150	200	150	0	1
105		350	400	175	225	400	175	175	200	175	00	1
110		350	400	175	225	400	175	175	200	175	00	0
115		350	400	175	250	400	175	175	200	175	00	0
120		400	400	200	250	400	200	200	200	200	000	0
125		400	400	200	250	400	200	200	200	200	000	00
130		400	400	200	300	400	200	200	200	200	000	00
135		450	600	200	300	400	200	225	400	200	0000	00
140		450	600	225	300	400	225	225	400	225	0000	00
145		450	600	225	300	400	225	225	400	225	0000	000
150		450	600	225	300	400	225	225	400	225	0000	000
155		500	600	275	350	400	275	250	400	275	0000	000
160		500	600	275	350	400	275	250	400	275	250	000
165		500	600	275	350	400	275	250	400	275	250	0000
170		500	600	275	350	400	275	300	400	275	250	0000
175		600	600	275	350	400	275	300	400	275	300	0000
180		600	600	275	400	400	275	300	400	275	300	0000
185		600	600	300	400	400	300	300	400	300	300	0000
190		600	600	300	400	400	300	300	400	300	300	250
195		600	600	300	400	400	300	300	400	300	350	250
200		600	600	300	400	400	300	300	400	300	350	250
210					450	600	325	350	400	325	400	300
220					450	600	325	350	400	325	400	300
230					500	600	400	350	400	400	500	300
240					500	600	400	400	400	400	500	350
250					500	600	400	400	400	400	500	350
260					600	600	400	400	400	400	600	400
270					600	600	450	450	600	450	600	400
280					600	600	450	450	600	450	600	500
290					600	600	450	450	600	450	700	500
300					600	600	450	450	600	450	700	500
320								500	600	500	750	600
340								600	600	550	900	600
360								600	600	550	1000	700
380								600	600	600	1250	750
400								600	600	600	1500	900
420											1750	1000
440											2000	1250
460											....	1250
480											....	1500
500											....	1500

Non-fusible Safety Switches for Motor Circuits should be applied according to the 1947 National Electrical Code, Sections 4401 to 4411 inclusive, or to a later edition.

† Applications having unusually long starting period or frequent starting refer to Works for proper size breaker. High or low ambients affect rating of breakers.

USEFUL INFORMATION

ALTERNATING CURRENT GENERATORS AND MOTORS

Alternating Current Generators are built in two types, the revolving field and revolving armature types. The names of the two sets of windings are rotor and stator. The revolving field type machine is mostly used, because of the field current only having to pass through the brushes and collector rings, the high tension wires all being stationary.

Alternating Current Generators are separately excited. That is, the field current is supplied from an auxiliary Direct Current Generator, known as an exciter.

Current supplied from an Alternating Current Generator alternates in direction at regular intervals, and from this characteristic is derived the terms "frequency" or "cycles," which always has a numerical value which defines the period of the alternations. The most generally adopted systems operate at either 60 cycles, 720 alternations, or 25 cycles, 3000 alternations, while there are some Central Stations which supply either 40 cycle, 50 cycle, or 133 cycle current.

Alternating current is generated single, two or three phase, two and three phase systems being the most commonly used. They are better adapted for operating large motors. The three phase system has been universally adopted on account of economy in construction and operation. Single phase systems require two wires, two phase systems either three or four wires, and three phase systems three and four wires.

Alternating Current Motors are constructed single, two or three phase, and of many different types, and for all frequencies and synchronous speeds.

Single-Phase Motors: Single-phase motors are built in several different types, viz.: Repulsion, Repulsion Induction and Induction Types, being used for constant or variable speed service.

Repulsion Induction motors are the most generally used of all single-phase motors and furnished for constant and variable speed.

Polyphase Induction Motors: Polyphase Induction Motors are built in two types, viz.: Squirrel Cage and Slip Ring or Wire Wound Rotor Types.

Squirrel Cage Rotor Type motor has nearly a constant speed (starting torque high), and is the type most generally used for driving machinery.

Slip-ring motor is adapted for speed variation ranging from 50% to 100%, and also is used for constant speed service. It has a high starting torque with a low starting current demand, which particularly adapts it for any service where a heavy starting current is objectionable.

Both the Squirrel Cage and Slip-ring type motors can be supplied for any frequency, voltage or speed.

Starting Torque: The starting torque of a constant speed motor is twice full load torque on full voltage. In general the torque varies as the square of the applied voltage. The reason for using a reduced electromotive force at starting is to reduce the sudden shock which may throw off belts or cause mechanical injury, and to reduce the starting current. When 50% voltage is applied to the motor, half full load torque is given.

Synchronous Motors are primarily used for power factor correction and are also sometimes called "Synchronous Condensers," because they can be operated at a leading current to raise the power factor of an alternating current system. Synchronous motors for driving power are equipped with an extra starting winding, which will give from 30% to 50% full load torque, and will operate at a constant or synchronous speed with no slip. It is advisable to have one or more synchronous motors on all alternating current systems. Each case requires a particular calculation to fit it with the proper sized motor for the conditions and should be referred to those familiar with synchronous motor installations.

Starting of Synchronous Motors: The starting of synchronous motors differs from the starting of induction motors, due to the fact that they have a field which is supplied from an auxiliary, known as an exciter.

Before starting the motor, first see that the field discharge switch is open from the field of the motor, but the motor field must be short circuited through the field discharge resistance. Otherwise, there will be a high voltage discharge between the field coils when the current is thrown on the motor, which is due to a transformer action between the windings. After seeing that the field switch is in its proper position, set the field rheostat at a point to give zero power factor when the switch is thrown in. After these precautions have been taken, the motor is ready to start, and should come up to speed on throwing the compensator into the starting position. When the motor has attained full speed, throw the compensator into running position, and then close the field switch, when the motor will step into synchronism. After this the rheostat should be set for full field current, and the motor will then operate "leading."

To stop the motor, first turn the rheostat back to the zero power factor position, then open the field switch and throw off the compensator, the switches and rheostat being in position for next starting.

If a synchronous motor which has sufficient starting torque to meet the load conditions should fail to start when the current is thrown into the stator windings, it is probably due to the "standing" relation of the field to the stator windings, because of there being an equal number of stator to rotor coils, and should they both be in a central position to each other, the rotor will not have any starting torque. To remedy this move the rotor a slight distance in either direction, and the rotor will then start.

FULL LOAD RATINGS OF A.C. AND D.C. MOTORS

3 Phase—60 Cycle Motors

H.P.	R.P.M.	Full Load Current			
		110 v	220 v	440 v	550 v
¼	1800	1 92	0 96	0 48	0 38
	1200	2 32	1 16	0 58	0 46
	900	2 90	1 45	0 73	0 58
⅓	1800	2 32	1 16	0 58	0 47
	1200	2 86	1 43	0 72	0 58
	900	3 50	1 75	0 88	0 71
½	1800	3.36	1.68	0.84	0.67
	1200	4 14	2 07	1 04	0 83
	900	5 80	2 90	1 45	1 16
¾	1800	4 66	2 33	1 17	0 93
	1200	5 70	2 85	1 43	1 14
	900	6 90	3 45	1 73	1 38
1	3600	5 50	2 75	1 38	1 10
	1800	6 10	3 05	1 53	1 22
	1200	7 08	3 54	1 77	1 42
	900	7 48	3 74	1 87	1 50
1½	3600	8 34	4 17	2 09	1 67
	1800	8 56	4 28	2 14	1 71
	1200	9 70	4 85	2 43	1 94
	900	11 60	5 81	2 91	2 32
2	3600	11 1	5 56	2 78	2 22
	1800	11 5	5 76	2 88	2 30
	1200	12 7	6 35	3 18	2 54
	900	14 4	7 21	3 61	2 88
3	3600	15 7	7 87	3 94	3 14
	1800	16 6	8 29	4 14	3 32
	1200	17 8	8 92	4 46	3 56
	900	20 4	10 20	5 09	4 08
5	3600	25 4	12 7	6 34	5 08
	1800	26 4	13 2	6 60	5 28
	1200	28 2	14 1	7 05	5 64
	900	31 2	15 6	7 80	6 24
7½	3600	38 4	19 2	9 6	7 68
	1800	38 6	19 3	9 7	7 72
	1200	40 6	20 3	10 2	8 12
	900	47 6	23 8	11 9	9 51
10	3600	49 0	24 5	12 3	9 8
	1800	50 4	25 2	12 6	10 1
	1200	53 2	26 6	13 3	10 6
	900	57 8	28 9	14 5	11 6
	600	67 6	33 8	16 9	13 5
15	3600	73 4	36 7	18 4	14 7
	1800	76 2	38 1	19 1	15 2
	1200	79 8	39 9	20 0	16 0
	900	83 8	41 9	21 0	16 8
	600	96 6	48 3	24 2	19 3
20	3600	98	49 0	24 5	19 6
	1800	101	50 5	25 3	20 2
	1200	103	51 7	25 9	20 6
	900	109	54 6	27 3	21 8
	600	123	61 5	30 8.	24 6
25	3600	118	59 2	29 6	23.6
	1800	125	62 7	31 3	25 0
	1200	129	64 7	32 3	25 8
	900	135	67 4	33 7	27 0
	600	144	71 9	35 9	28 8
30	1800	146	72 8	36 4	29 2
	1200	154	77 1	38 6	30 8
	900	159	79 4	39 7	31 8
	600	176	87 9	43 9	35 2
40	1800	196	98	49 0	39 2
	1200	198	99	49 5	39 6
	900	208	104	52 0	41 6
	600	226	113	56 5	45 2
50	1800	242	121	60 5	48 4
	1200	244	122	61 0	48 8
	900	254	127	63 5	50 8
	600	276	138	69 0	55 2
60	1800	.....	143	71 5	57 2
	1200	.....	148	74 0	59 2
	900	.....	151	75 5	60 4
	600	.....	162	81 0	64 8
75	1800	.....	178	89 0	71 2
	1200	.....	181	90 5	72 4
	900	.....	187	93 5	74 8
	600	.....	199	99 5	79 6
100	1800	.....	233	116	93 2
	1200	.....	239	120	95 6
	900	.....	245	123	98 0
	600	.....	257	128	103.0
	450	.....	290	145	116.0

2 Phase, 4 Wire—60 Cycle Motors

H.P.	R.P.M.	Full Load Current			
		110 v	220 v	440 v	550 v
¼	1800	1 66	0 83	0 42	0.33
	1200	2 01	1 00	0 50	0.40
	900	2 51	1 25	0.63	0.50
⅓	1800	2 00	1 00	0.50	0.40
	1200	2 48	1 24	0 62	0.50
	900	3.04	1 52	0.76	0.61
½	1800	2.94	1.47	0 74	0.59
	1200	3 58	1 79	0 90	0.72
	900	5 02	2 51	1 25	1.00
¾	1800	4 03	2 02	1.01	0.81
	1200	4 93	2 47	1 24	0 99
	900	5 97	2 98	1.50	1 19
1	3600	4 76	2 38	1 19	0 95
	1800	5 28	2 64	1 32	1 06
	1200	6 13	3 06	1.53	1 23
	900	6 47	3 24	1 62	1 30
1½	3600	7 22	3 61	1 81	1 45
	1800	7 41	3.70	1 85	1 48
	1200	8 40	4 20	2 10	1 68
	900	10.0	5.03	2 52	2 01
2	3600	9 6	4 81	2 41	1 92
	1800	10 0	4 98	2 49	1.99
	1200	11 0	5 50	2 75	2 20
	900	12 5	6 23	3 12	2.49
3	3600	13 6	6 81	3 41	2 72
	1800	14 4	7 17	3 59	2 87
	1200	15 4	7 72	3 86	3 08
	900	17 7	8 80	4 40	3.54
5	3600	22 0	11 0	5 50	4 40
	1800	22 8	11 4	5.71	4.57
	1200	24 4	12 2	6 10	4 88
	900	27 0	13 5	6.75	5 40
7½	3600	33 2	16 6	8 31	6 65
	1800	33 5	16 7	8 40	6 68
	1200	35 1	17 6	8.80	7 02
	900	41 2	20 6	10 3	8 23
10	3600	42 4	21.2	10 6	8 48
	1800	43 6	21 8	10.9	8 75
	1200	46 0	23 0	11 5	9 17
	900	50 0	25 0	12 5	10 0
	600	58 5	29 2	14 6	11 7
15	3600	63 5	31 7	15.9	12 7
	1800	66 0	33 0	16.5	13 2
	1200	69 0	34 5	17 3	13 8
	900	72 5	36 3	18.2	14 5
	600	83 6	41 8	20 9	16.7
20	3600	84 8	42 4	21 2	17 0
	1800	87 5	43 7	21 9	17.5
	1200	89 2	44 7	22.4	17 8
	900	94 4	47 3	23 6	18 9
	600	106.0	53.0	26 7	21.3
25	3600	102	51 2	25 6	20 4
	1800	108	54 3	27 1	21 6
	1200	112	56 0	28 0	22 3
	900	117	58 3	29 2	23 4
	600	125	62 4	31.2	24 9
30	1800	126	63 0	31 5	25 3
	1200	133	66 7	33 4	26 7
	900	138	68 7	34 3	27 5
	600	152	76 1	38 0	30 5
40	1800	170	85	42 5	33 9
	1200	172	86	43 0	34 3
	900	180	90	45 0	36 0
	600	196	98	49 0	39 1
50	1800	209	105	52 4	41 9
	1200	211	106	52 8	42.3
	900	220	110	55 0	44 0
	600	239	120	60 0	47.7
60	1800	.....	124	62 0	49.5
	1200	.....	128	64.0	51 2
	900	.....	131	65.4	52.3
	600	.....	140	70 0	56.0
75	1800	.....	154	77 0	61.6
	1200	.....	157	78 4	62.6
	900	.....	162	81 0	64.8
	600	.....	172	86.0	68 8
100	1800	.....	202	100	80.6
	1200	.....	207	104	82 7
	900	.....	212	106	84.8
	600	.....	223	111	89 2
	450	.....	251	126	101.0

Single Phase Motors

H.P.	R.P.M.	Full Load Current			
		110 v	220 v	440 v	550 v
⅛	3600	2 52	1.26	0.63	0.50
	1800	2 80	1.40	0.70	0.56
	1200	3.40	1.70	0.85	0.68
⅙	3600	2.70	1.35	0.68	0.54
	1800	3.00	1.50	0.75	0.60
	1200	3.60	1.80	0.90	0.72
¼	3600	3 60	1.80	0.90	0.72
	1800	4.12	2.06	1.03	0.82
	1200	5.50	2.75	1.38	1.10
⅓	3600	4.50	2.25	1.13	0.90
	1800	5.00	2.50	1.25	1.00
	1200	6.00	3.00	1.50	1.20
½	3600	5.10	2.55	1.27	1.02
	1800	5.80	2.90	1.45	1.16
	1200	7.16	3.58	1.80	1.44
	900	10 0	5.02	2.50	2.00
¾	3600	7.17	3.58	1.79	1.44
	1800	8 06	4.04	2.02	1 62
	1200	9 86	4 94	2.48	1.98
	900	11 9	5.96	2.98	2 38
1	3600	9 5	4.76	2.38	1.90
	1800	10 6	5 28	2.64	2.12
	1200	12 3	6.12	3.06	2.46
	900	12 9	6.48	3.24	2.60
1½	3600	14 4	7.22	3.62	2.90
	1800	14.8	7.40	3.70	2.96
	1200	16 8	8.40	4 20	3.36
	900	20.0	10.10	5.04	4.02
2	3600	19.2	9 6	4.82	3.84
	1800	20 0	10 0	4.98	3.98
	1200	22 0	11.0	5.50	4.40
	900	25.0	12.5	6.24	4.98
3	3600	27.2	13.6	6.82	5.44
	1800	28.8	14.3	7.18	5.74
	1200	30 8	15 4	7.72	6.16
	900	35 4	17.6	8.80	7.08
5	3600	44 0	22.0	11.0	8.80
	1800	45 6	22.8	11.4	9.14
	1200	48 8	24 4	12.2	9.76
	900	54 0	27.0	13.5	10.8
7½	3600	66 4	33 2	16.6	13.3
	1800	67 0	33 4	16.8	13.4
	1200	70.2	35.2	17 6	14.0
	900	82 4	41.2	20.6	16.5
10	3600	84 8	42.4	21 2	17.0
	1800	87.2	43.6	21.8	17.5
	1200	92.0	46.0	23 0	18.3
	900	100.0	50.0	25.0	20.0
	600	117.0	58.4	29.2	23.4
15	3600	127	63.4	31.8	25.4
	1800	132	66.0	33.0	26.4
	1200	138	69.0	34.6	27.6
	900	145	72.6	36.4	29.0
	600	167	83.6	41 8	33.4

D. C. Motors

H.P.	Full Load Current			
	115 v	230 v	550 v	
⅛	1.4	.7	.3	
⅙	1.8	.9	.4	
¼	2.3	1.2	.5	
½	4.5	2.3	1.0	
¾	6.5	3.3	1.4	
1	8.4	4.2	1.7	
1½	12.5	6.3	2.6	
2	16 1	8.3	3.4	
3	24.0	12.3	5.0	
4	32	16.1	6.6	
5	40	19.8	8.2	
7½	58	28.7	12.0	
10	75	38	16.0	
12½	94	47	19.5	
15	112	56	23.0	
20	148	74	30	
25	185	92	38	
30	220	110	45	
35	257	128	53	
40	294	146	61	
45	330	163	68	
50	364	180	75	
60	436	215	90	
75	540	268	111	
90	648	322	132	
100	720	357	146	

The full load ampere rating of motors of a given horse power rating will vary somewhat depending largely upon the type of motor. The full load values listed in the adjacent tables can be considered "average values" for the different types and makes of motors. High torque squirrel cage motors will have a full load current at least 10% higher than listed in the tables.

For 25 cycle motors, the full load current value will be approximately that of a 60 cycle motor having the same number of poles. In other words, for a 750 rpm. 25 cycle motor, use the data for the corresponding 1800 rmp. 60 cycle motor. This rule is reasonably correct for 25 cycle motors above 500 rpm.

For 2 phase, 3 wire squirrel cage motors, the current in the common line is about 1.4 times the full load current values that are listed for the 2 phase 4 wire motors.

USEFUL INFORMATION

MOTOR WIRING AND FUSING DATA

Adapted from 1951 National Electrical Code

H.P. of Motor	Current Rating Amperes	Minimum Size Wire AWG or MCM		Conduit Size		Maximum Running Fuse Amperes
		Type R or T	Type RH	Type R or T	Type RH	
Single Phase A.C.—115 Volts						
½	7.4	14	14	½	½	10
¾	10.2	14	14	½	½	15
1	13	12	12	½	½	20
1½	18.4	10	10	¾	¾	25
2	24	10	10	¾	¾	30
3	34	6	8	1	¾	45
5	56	4	4	1¼	1¼	70
7½	80	1	3	1½	1¼	100
10	100	1/0	1	1½	1½	125
Three Phase Induction Motor—220 Volts						
½	2	14	14	½	½	3
¾	2.8	14	14	½	½	4
1	3.5	14	14	½	½	4
1½	5	14	14	½	½	8
2	6.5	14	14	½	½	8
3	9	14	14	½	½	12
5	15	12	12	½	½	20
7½	22	10	10	¾	¾	30
10	27	8	8	¾	¾	35
15	40	6	6	1	1	50
20	52	4	6	1¼	1	70
25	64	3	4	1¼	1¼	80
30	78	1	3	1½	1¼	100
40	104	2/0	1	2	1½	125
50	125	3/0	2/0	2	2	175
60	150	4/0	3/0	2½	2	200
75	185	300	4/0	2½	2½	250
100	246	500	350	3	3	300
125	310	750	600	3½	3½	400
150	360	1000	700	4	3½	450
200	480	.....	1500	.....	5	600
D.C.—115 Volts						
½	4.6	14	14	½	½	6
¾	6.6	14	14	½	½	10
1	8.6	14	14	½	½	12
1½	12.6	12	12	½	½	15
2	16.4	10	10	¾	¾	20
3	24	10	10	¾	¾	30
5	40	6	6	1	1	50
7½	58	3	4	1¼	1¼	70
10	76	2	3	1¼	1¼	100
15	112	2/0	1/0	2	1½	150
20	148	4/0	3/0	2	2	200
25	184	300	4/0	2½	2	250
30	220	400	300	3	2½	300
40	292	700	500	3½	3	400
50	360	1000	700	4	3½	450

Current Rating Amperes	Minimum Size Wire AWG or MCM		Conduit Size		Maximum Running Fuse Amperes
	Type R or T	Type RH	Type R or T	Type RH	
Single Phase A.C.—230 Volts					
3.7	14	14	½	½	6
5.1	14	14	½	½	8
6.5	14	14	½	½	10
9.2	14	14	½	½	12
12	14	14	½	½	15
17	10	10	¾	¾	25
28	8	8	¾	¾	35
40	6	6	1	1	50
50	4	6	1¼	1	60
Three Phase Induction Motor—440 Volts					
1	14	14	½	½	2
1.4	14	14	½	½	2
1.8	14	14	½	½	3
2.5	14	14	½	½	4
3.3	14	14	½	½	4
4.5	14	14	½	½	6
7.5	14	14	½	½	10
11	14	14	½	½	15
14	12	12	½	½	20
20	10	10	¾	¾	25
26	8	8	¾	¾	35
32	8	8	¾	¾	40
39	6	6	1	1	50
52	4	6	1¼	1	70
63	3	4	1¼	1¼	80
75	2	3	1¼	1¼	100
93	1/0	1	2	1½	125
123	3/0	2/0	2	2	150
155	4/0	3/0	2½	2	200
180	300	4/0	2½	2½	225
240	500	350	3	3	300
D.C.—230 Volts					
2.3	14	14	½	½	3
3.3	14	14	½	½	4
4.3	14	14	½	½	6
6.3	14	14	½	½	8
8.2	14	14	½	½	12
12	14	14	½	½	15
20	10	10	¾	¾	25
29	8	8	¾	¾	40
38	6	6	1	1	50
56	4	4	1¼	1¼	70
74	2	3	1¼	1¼	90
92	1/0	2	1½	1¼	125
110	2/0	1/0	2	1½	150
146	4/0	3/0	2	2	200
180	300	4/0	2½	2	225

Conduit size based on three conductors in one conduit for three phase A.C. motors and on two conductors in one conduit for direct current and single phase A.C. motors.

USEFUL INFORMATION

BARE COPPER WIRE

HARD OR SOFT DRAWN

Dimensions, Weights and Resistances

Am. Gauge B. & S. No.	Diam. Mils	Circular Mils	Pounds Per 1000 Ft.	Pounds Per Mile	Feet Per Pound	Ohms Per 1000 Feet	Ohms Per Mile	Feet Per Ohm	Ohms Per Pound
0000	460.	211600.	639.8	3378.	1.56	.04906	.25903	20383.	.000076736
000	409.640	167805.	507.3	2678.	1.97	.06186	.32664	16165.	.00012039
00	364.800	133079.40	402.4	2124.	2.49	.07801	.41187	12820.	.00019423
0	324.950	105592.50	319.4	1686.	3.13	.09831	.51909	10409.	.00030772
1	289.300	83691.20	253.0	1336.	3.95	.12404	.65490	8062.3	.00048994
2	257.630	66373.	200.6	1059.	4.99	.15640	.82582	6393.7	.00078045
3	229.420	52634.	159.1	840.01	6.29	.19723	1.0414	5070.2	.0012406
4	204.310	41472.	126.2	666.3	7.93	.24869	1.3131	4021.	.0019721
5	181.840	33102.	100.0	528.2	10.	.31361	1.6558	3188.7	.0031361
6	162.020	26250.50	79.35	419.0	12.61	.39546	2.0881	2528.7	.0049868
8	128.490	16509.	49.92	263.6	20.05	.62881	3.3201	1590.3	.012608
9	114.430	13094.	39.57	208.9	25.28	.79281	4.1860	1261.3	.010042
10	101.890	10381.	31.30	165.8	31.38	1.	5.2800	1000.	.031380
12	80.808	6529.90	19.74	104.2	50.69	1.5898	8.3940	629.02	.080585
14	64.084	4106.76	12.42	65.59	80.42	2.5266	13.3405	375.79	.203180
16	50.820	2582.67	7.802	41.20	127.87	4.0176	21.2130	248.90	.513737
17	45.257	2048.20	6.20	32.746	161.24	5.0660	26.7485	197.39	.816839
18	40.303	1624.33	4.92	25.970	203.31	6.3880	33.7285	156.54	1.298764
19	35.890	1288.09	3.90	20.594	256.39	8.0555	42.5329	124.14	2.065312
20	31.961	1021.44	3.09	16.331	323.32	10.1584	53.6362	98.44	3.284374
21	28.462	810.09	2.45	12.952	407.67	12.8088	67.6302	78.07	5.221775
22	25.347	642.47	1.95	10.272	514.03	16.1504	85.2343	61.92	8.301819
23	22.571	509.45	1.54	8.1450	648.25	20.3674	107.540	49.10	13.20312
24	20.100	404.01	1.22	6.4593	817.43	25.6830	135.606	38.94	20.99405
25	17.900	320.41	.97	5.1227	1030.71	32.3833	170.984	30.88	33.37780
26	15.940	254.08	.77	4.0623	1299.77	40.8377	215.623	24.49	53.07946

Solid Conductors

No. B. & S.	Diameter		Square of Sectional Diameter=Area		Approved Carrying Capacity In Amperes National Code	Approximate Weight Lbs. Bare		Approximate Weight Weatherproof Insulation	
	Mils	Millimeters	Circular Mils	Square Millimeters		Lbs. Per 1000 Ft.	Lbs. Per Mile	Lbs. Per 1000 Ft.	Lbs. Per Mile
0000	460.	11.684	211600.	107.219	225	639.8	3378.	767	4050
000	409.640	10.405	167805.	85.028	175	507.3	2678.	629	3320
00	364.800	9.266	133079.4	67.431	150	402.4	2124.	502	2650
0	324.950	8.254	105592.5	53.504	125	319.4	1686.	407	2150
1	289.300	7.348	83694.2	42.409	100	253.0	1336.	316	1670
2	257.630	6.544	66373.	33.632	90	200.6	1059.	260	1370
3	229.420	5.827	52634.	26.670	80	159.1	840.1	199	1050
4	204.310	5.189	41742.	21.151	70	126.2	666.3	164	865
5	181.940	4.621	33102.	16.773	55	100.0	528.2	135	710
6	162.020	4.115	26250.5	13.301	50	79.35	419.0	112	590
8	128.490	3.264	16509.	8.366	35	49.92	263.6	75	395
10	101.890	2.588	10381.	5.260	25	31.30	165.8	53	280
12	80.808	2.053	6529.9	3.309	20	19.74	104.2	35	185
14	64.084	1.628	4106.8	2.081	15	12.42	65.59	25	130
16	50.820	1.291	2582.9	1.309	6	7.802	41.20	20	105

USEFUL INFORMATION

WIRE DATA

Standard Stranded Copper Conductors

Size C. M.	Number of Wires In The Strand: 7	19	37	7x7—49	61	91	127	169	217
	Diameter In Inches of Each Wire In The Strand								
2000000	.5345	.3243	.2325	.202	.181	.1482	.1255*	.1088	.096
1750000	.5000	.3034	.2175	.189	.1694	.1386	.1157*	.1003	.0898
1500000	.4629	.2810	.2013	.175	.1568	.1284*	.1087	.0942	.0831
1250000	.4226	.2565	.1838	.1507	.1431	.1172	.0992	.086	.0759
1000000	.378	.2294	.1644	.1429	.1285*	.1048	.0887	.0769	.0678
950000	.3684	.2236	.1602	.1392	.1248*	.1021	.0864	.075	.0662
900000	.3586	.2176	.1559	.1355	.1215*	.0994	.0841	.073	.0644
850000	.3484	.2115	.1516	.1317	.1181*	.0966	.0818	.0709	.0626
800000	.338	.205	.147	.1278	.1145*	.0937	.0793	.0687	.0607
750000	.3273	.1986	.1424	.1237	.1109*	.0908	.0768	.0666	.0588
700000	.3163	.1919	.1375	.1195	.1071*	.0883	.0742	.0644	.0568
650000	.3047	.1850	.1325	.1152	.1032*	.0845	.0716	.0620	.0547
600000	.2928	.1778	.1273	.1107	.0992*	.0812	.0687	.0596	.0526
550000	.2803	.1701	.1219	.106	.0950*	.0777	.0658	.0570	.0503
500000	.2672	.1622	.1162*	.101	.0905	.0741	.0627	.0544	.048
450000	.2535	.1539	.1103*	.0958	.0859	.0703	.0595	.0516	.0455
400000	.2391	.1451	.1040*	.0904	.081	.0663	.0561	.0487	.0429
350000	.2236	.1357	.0973*	.0845	.0757	.0620	.0526	.0455	.0401
300000	.207	.1257	.0901*	.0783	.0701	.0573	.0486	.0421	.0372
250000	.189	.1147	.0822*	.0714	.064	.0524	.0444	.0384	.0340
Size B. & S.									
0000	.1736	.1055*	.0756	.0657	.0589	.0482	.0408	.....	.....
000	.1548	.0940*	.0673	.0586	.0525	.0429	.0363	.....	.....
00	.1378	.0836*	.0599	.0521	.0467	.0382	.0323	.....	.....
0	.1228	.0746*	.0534	.0464	.0416	.0340	.0288	.....	.....
1	.1093	.0663*	.0475	.0413	.0370	.0303	.0252	.....	.....
2	.0973*	.0592	.0423	.0369	.0329	.0269	.0228	.....	.....
3	.0867*	.0526	.0377	.0327	.0294	.0240	.0203	.....	.....
4	.0772*	.0468	.0335	.0291	.0261	.0214	.0179	.....	.....
5	.0687*	.0417	.0299	.026	.0233	.0190	.0161	.....	.....
6	.0612*	.0372	.0266	.0231	.0207	.0169	.0143	.....	.....
7	.0545*	.0331	.0237	.....	.0184	.0151	.0128	.....	.....
8	.0485*	.0293	.0211	.0184	.0164	.0135	.0114	.....	.....
9	.0435*	.0262	.0187	.....	.0146	.0120	.0101	.....	.....
10	.0385*	.0223	.0168	.....	.0129	.0106	.0090	.....	.....

*Indicates standard construction for rubber covered cables.

Equivalents of Wires

Showing Approximately Equal Capacities in the Use of Conductors of Different Sizes

Total Capacity C. M.	Equivalent in Number of Smaller Conductors or Combinations: 2	3	4	5	6	Combinations	
1000000	.....	.....	.....	0000	000	.....	.....
800000	.....	.....	0000	000	00	.....	.....
600000	.....	0000	000	00	0	.....	.....
500000	.....	000	00	0	1	.....	.....
400000	0000	00	0	1	2	.....	.....
350000	000	.....	1	2	.....	0000 & 00	.....
300000	.....	0	2	.....	3	000 & 00	0000 & 1
250000	00	1	.....	3	4	000 & 1	0000 & 4
B. & S.							
0000	0	2	3	4	5	00 & 1	000 & 3
000	1	3	4	5	6	0 & 2	00 & 5
00	2	4	5	6	.....	1 & 3	0 & 6
0	3	5	6	.....	8	2 & 4	.....
1	4	6	.....	8	.....	3 & 5	.....
2	5	.....	8	.....	.....	4 & 6	.....
3	6	8	.....	10	.....	.....	.....
4	.....	.....	10	.....	.....	6 & 8	.....
5	8	10	.....	12	.....	.....	.....
6	.....	.....	12	.....	14	8 & 10	.....
8	.....	.....	14	.....	18	12 & 14	.....
10	.....	.....	16	.....	16	10 & 12	.....

USEFUL INFORMATION

WIRING FORMULA

From Ohm's Law the proper size of wire that is necessary to carry a current any distance with a given loss in volts can be readily determined.

$$\frac{\text{Length of run in ft.} \times \text{amperes} \times 21.5 = \text{Circular Mils}}{\text{Volts lost}}$$

In the above Formula the number of feet must be measured one way, not both sides of the circuit; volts lost should be taken as the drop allowed in volts, and circular mils show the size of wire to use.

Example:—What size wire should be used on a 250-volt circuit where it is necessary to carry 150 amperes a distance of 300 feet to a center of distribution with a loss of 3 per cent. under full load?

$$\frac{300 \times 150 \times 21.5}{7.5}$$

= 129,000 circular mils, or No. 00 B. & S. gauge which is the next size heavier.

In using this or any other formula to determine the size of copper to use, care should be taken to see that the size adopted is not smaller than allowed in the Underwriters' table of safe carrying capacities, which are fixed without considering the loss in line.

The general practice in balanced 3-wire direct-current systems with a ceneral neutral wire is to figure the line loss on the same size as either of the others.

The above Wiring Formula is based upon one foot of copper wire, having a cross sectional area of one circular mil, with a resistance of approximately 10.75 ohms, so that the resistance of any copper wire—

$$\frac{\text{Length in feet} \times 10.75}{\text{Circular Mils}}$$

Substituting this expression for R. in Ohm's Law:

$$E = \frac{C \times \text{length in feet} \times 10.75}{\text{Circular Mils}}$$

and circular mils =

$$\frac{C \times \text{length in feet} \times 10.75}{E}$$

In the Wiring Formula, however, the length in feet is considered the "run" one side of the circuit, and the term 10.75 is multiplied by 2.

CARRYING CAPACITIES OF INSULATED WIRES AND CABLES

Number A.W.G.	Capacity Circular Mils	Amperes	
		Rubber Insulation	Weatherproof Insulation
18	1,624	3	6
16	2,583	6	10
14	4,107	15	20
12	6,530	20	30
10	10,380	25	35
8	16,510	35	50
6	26,250	50	70
5	33,100	55	80
4	41,740	70	90
3	52,630	80	100
2	66,370	90	125
1	83,690	100	150
0	105,500	125	200
00	133,100	150	225
000	167,800	175	275
.....	200,000	200	300
0000	211,600	225	325
.....	300,000	275	400
.....	400,000	325	500
.....	500,000	400	600
.....	600,000	450	680
.....	700,000	500	760
.....	800,000	550	840
.....	900,000	600	920
.....	1,000,000	650	1,000
.....	1,100,000	690	1,080
.....	1,200,000	730	1,150
.....	1,300,000	770	1,220
.....	1,400,000	810	1,290
.....	1,500,000	850	1,360
.....	1,600,000	890	1,430
.....	1,700,000	930	1,490
.....	1,800,000	970	1,550
.....	1,900,000	1,010	1,610
.....	2,000,000	1,050	1,670

Drop of potential is not taken into consideration in the above table. These amperages for rubber-covered wires are adopted because to exceed them may cause gradual deterioration of the insulation even though the chance of ignition from overheating may be small.

Wires smaller than No. 14 should not be used except as prescribed in Underwriters' rules.

VOLTS LOST PER 1,000 FEET PER AMPERE

Size Circular Mils	Volts Lost	Size Circular Mils	Volts Lost
2,000,000	0.00535	0000	0.05053
1,750,000	0.00611	000	0.06372
1,500,000	0.00713	00	0.08035
1,250,000	0.00856	0	0.10126
1,000,000	0.01070	1	0.12776
950,000	0.01126	2	0.16109
900,000	0.01189	3	0.20315
850,000	0.01259	4	0.25615
800,000	0.01337	5	0.32302
750,000	0.01427	6	0.40732
700,000	0.01529	7	0.51367
650,000	0.01646	8	0.64767
600,000	0.01783	9	0.81659
550,000	0.01945	10	1.0300
500,000	0.02140	12	1.6375
450,000	0.02378	14	2.6685
400,000	0.02675	16	4.1397
350,000	0.03057	18	6.5828
300,000	0.03567	19	8.5376
250,000	0.04280	20	10.467

DATA FOR ELECTRIC HEATING CALCULATIONS

Correct application of the heater is just as important as correct selection, and depends mostly upon elimination of heat losses through radiation. convection and conduction. One of the important advantages of electric heat is that it can be applied almost exactly where it is required, with little heat lost in transmission. Radiation and convection losses from the material, machine or container can be reduced by efficient insulation of heated parts. Here again, the inherently simple construction of electric heaters facilitates application of the insulating material. Heat losses can also be calculated easily and accurately, and the applicable data is included for each type of amterial as follows:

Volume of cylindrical tank = Radius x Radius x 3.1416 x Length
1 gallon = 231 cu. in.
1 gallon of water = 8⅓ lbs.
1 cubic foot of water = 62.5 lbs.
1 kilowatt hour will raise temperature of 4 gallons of water 100° F.
1 kilowatt hour = 3412 B.T.U.

LIQUID HEATING

The most efficient method of heating any liquid is by direct immersion, since the heat is then applied directly to the material and losses can be held to a minimum. However, when obstructions within the container, nature of liquid or other special conditions prevent direct immersion, conduction type heaters may be clamped to the bottom and sides of the tank. Obviously, the heat losses of clamp-on applications are greater and such installations usually require a greater total applied wattage than immersion applications.

Characteristics and Heat Requirements of Common Liquids

Liquid	Specific Heat	Weight—Lbs. per Gal.	Weight—Lbs. per Cu. Ft.	Watt hours per Lb. per Deg. F. Rise
Alcohol	.65	7.4	55	.19
Glycerin	.58	10.6	79	.170
Oil (Machine	.40	7.8	58	.117
Paraffin	.71	7.5	56	.208
Petroleum	.50	7.5	57	.149
Water	1.0	8.3	63	.293

To evaporate one pound of water at 212° F. requires 283 watt hours.

Total watthours or watts required to heat up in one hour equals:—Total weight in lbs. x degrees F. rise x watt hours per lb. per degree F. rise.

If two hours can be allowed use half this value. If only one half hour can be allowed, use double this value, etc.

EXAMPLE:—10 gallons of alcohol to be heated from 70° F. to 120° F. in one hour: 10 (gallons) x 7.4 (weight per gallon) x 50 (° F. rise) x .19 (watthours per pound per ° F.) equals 703 watts for heating the liquid.

To the watts required for heating the liquid should be added radiation losses as calculated below.

If objects are dipped into the liquid, determine the total weight of the material dipped per hour, its temperature rise, and add the heat absorption of these objects calculated on the basis of their weight per table No. 4.

Radiation Losses From Closed Tanks

Assuming three inches of good insulation on all surfaces of tank, the radiation losses will be .08 watts per degree Fahrenheit per square foot of exposed tank surface. (See table 7 for heat losses through insulated walls and savings effected by good heat insulation.

FORMULA:—Temperature Differential between tank and room in degrees F. x square feet of tank area, x .08 quals watts radiation.

Add this to total watts required to heat material as calculated above.

Complete Wattage Requirements for liquid Heating Applications include: Watts required to heat liquid, plus watts required to compensate for radiation from sides of tank and surface if open tank, plus Watts required to compensate for losses due to heat absorbed by any material dipped in the liquid, plus watts required to compensate for heat absorbed by container.

AIR HEATING

The convenient size, shape and construction of standard electric space heaters, makes them easily applicable to a wide variety of heating problems. Isolated rooms and buildings, portions of buildings, locations where no other heat will reach, can be heated conveniently and economically with electric heaters. They are also used for adding to inadequately heated rooms and for other unusual problems.

Calculation of the wattage required to heat any space must include the watts required to heat the air, heat absorbed by and lost thru the walls and heat lost through windows. The following data will be found valuable in calculating wattage requirements for many applications.

Assuming a required temperature rise of 70° F., with 12″ brick wall or equally good construction such as insulated double wood frame wall, total wattage required will be the sum of A, B and C as follows:

A = 0.35 watts per cu. ft. of room (to provide one complete change of air per hour).
B = 3.5 watts per sq. ft. of area of exposed walls. ceiling and floor.
C = 35.0 watts per sq. ft. of exposed window area.

For thinner brick or concrete walls or poor frame construction, some extra wattage must be added depending upon actual conditions, to compensate for greater heat losses.

EXAMPLE:—(All dimensions to be in feet).

Watts A = width x length x height x .35.

Watts B = (2 x width x height) + (2 x width x length) + (2 x height x length)—total window area) x 3.5.

Watts C = Number of windows x width of windows x height of windows x 35.

Total watts required for 70° F. rise = A+B+C.

For higher temperature rise, multiply total watts by ratio between actual temperature rise and 70. For xample, for 100° F. rise use $\frac{100}{70}$ x total watts as falculated above = final watts required.

Select the required number of standard 500 watt space heaters and mount them at advantageous locations throughout the room for uniform heat distribution. All heaters should be carefully mounted and connected, and if in an exposed location, they should be enclosed with a rigid screen or guard to prevent contact by persons or inflammable material. The heaters should preferably be mounted horizontally on edge and spaced at least 1¾″ apart.

Energy Required to Heat Air

Temperature rise in Degrees F.	Watts required per Cu. Ft. per Hr.	Temperature rise in Degrees F.	Watts required per Cu. Ft. per Hr.
70	.35	300	1.65
100	.55	400	2.20
200	1.10	500	2.75

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